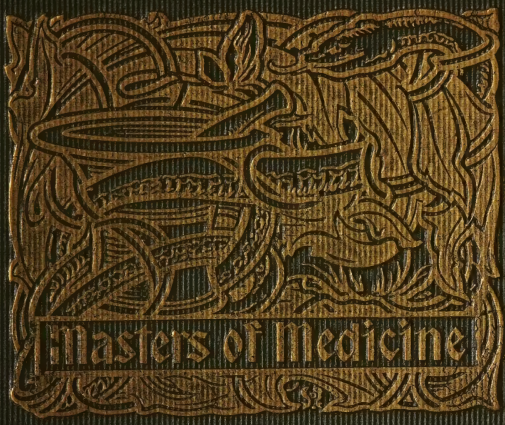

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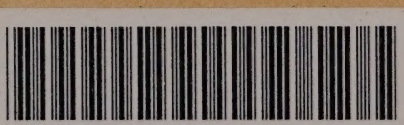

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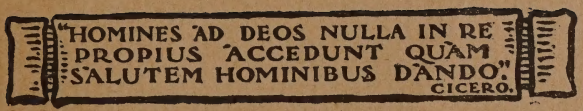

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MASTERS OF MEDICINE

THOMAS SYDENHAM

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Thomas Sydenham.

THOMAS SYDENHAM

BY

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To

SIR SAMUEL WILKS, BARONET,

LATE PRESIDENT OF

THE ROYAL COLLEGE OF PHYSICIANS, THIS RECORD

OF A GREAT ENGLISH PHYSICIAN

IS DEDICATED

WITH RESPECT AND AFFECTION.

PREFACE

THE constant complaint of all biographers of Sydenham has been the paucity of their materials. It has been the custom to say that nothing certain was known about his life, and even the most important events in it have been involved in great obscurity. This complaint is no longer well founded. The publication in recent years of historical documents from the Public Record Office, and other collections, has thrown a flood of light on the personal history of the seventeenth century, and on the life of Sydenham among others. Many contemporary statements, especially as to his military services, which had been strangely discredited, have been shown to be perfectly correct. Again, a more careful search into the earlier printed records has brought to light many facts overlooked by previous writers. The first bio-

grapher to make use of the English historical documents was a French physician, M. Frédéric Picard, whose life of Sydenham, a most laborious and accurate study from original sources, is far superior to any of its predecessors. But there are other books and documents which it was impossible that M. Picard, with all his thoroughness, should know.

The following sketch is not based upon any previous biography, but compiled entirely from original authorities, whether previously quoted or not. Some sources have, I believe, never been drawn upon before except in the article on Sydenham which I contributed to the "Dictionary of National Biography."

On this account it has seemed necessary to print in full some documents which are rather materials for history than history itself; and generally to give a good deal of detailed evidence which somewhat interferes with the writing of a continuous narrative. While regretting this, I hope that the stamp of authenticity thus given to the history may make up for other defects.

In a work of this compass it would be impossible to give the authority for every statement; but a general list of authorities is given at the end. For others, as well as for a bibliography of Sydenham's writings, I may refer to the "Dictionary of National Biography."

I should be glad if this sketch should induce some readers to study for themselves Sydenham's own works, of which good editions, both English and Latin, were published by the old Sydenham Society, and are still accessible.

The portrait placed as a frontispiece is from a direct photograph of the painting in the College of Physicians, which is, according to the highest authorities, the work of Mary Beale.

In conclusion, I desire to express my thanks to Dr. Nias, who very liberally placed his notes on the Sydenham family at my disposal.

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INTRODUCTION

ONE of the most sympathetic critics who ever wrote about Sydenham, that delightful essayist, Dr. John Brown, speaks of him as "The Prince of practical physicians, whose character is as beautiful and as genuinely English as his name." His name, indeed, has a thoroughly English sound. It calls up before our minds a little homely Somersetshire village which the fame of the great physician has made known throughout the world. And all the associations which cluster round his home life are equally English. He was born and bred in the heart of one of the most English parts of England, that old West Saxon kingdom which the modern Dorsetshire novelist has taught us again to know as Wessex. He was educated at the oldest English University, which has always drawn to itself, along with other elements of strength, the best intellectual promise of the western counties. He lived through a time when the English character was strung

up to an unexampled height of intensity, and, being placed near the centre of affairs, had special opportunity of feeling the throb of the national heart, and sharing its emotions.

Sydenham's character was certainly noble and beautiful. We will leave it to the genial Scottish physician to call it genuinely English. If there are strong elements in the English character, these Sydenham possessed, and if he had limitations, these also were national, and so not easily discernible by us.

We might go further and recognise a thoroughly English type of intellect in the follower of Bacon and comrade of Locke; linking his name with these two, perhaps the most representative of English thought, not only for his independence and originality, but for his love of the concrete, his prosaic, practical wisdom, his piety and benevolence. Locke left the subtleties of philosophy to show the reasonableness of Christianity, or to discourse of the education of children; and not their education only, but their diet and the thickness of their shoes. Bacon, if less practical, at all events gave such aims as these their most dignified expression, when he defined knowledge, not as matter for contemplation or discourse, but as "a rich Storehouse for the glory of the Creator and the relief of man's estate." No words could better consist with Sydenham's conception of knowledge.

But we must not be too exclusively national, lest we

run the risk of being provincial. Sydenham's is a name not for England only but for the world. We do not ignore the foundation of Greek science on which Sydenham built, nor the breath of French medicine, which no doubt in some degree inspired him. Still in the main the object of the following sketch is to exhibit the life and character of Sydenham not only in connection with medicine, but in its relation to English life, English history, and English science.

We have now to try to give some picture of that little corner of England in which the great reformer of practical medicine first saw the light, and of the material and moral surroundings in the midst of which he grew up.

First, it will be interesting to give some details concerning the little Dorsetshire village with which not our physician only, but his family were so closely associated. Wynford Eagle (according to Hutchins's History of Dorset) is a hamlet and chapelry belonging to Little Toller or Toller Fratrum, lying about eight miles from Dorchester. In Domesday Book it is called Wynfort. Its curious additional name is derived from the *Honor de Aquila*, or the Eagle, of which it was formerly held.

This great "Honour" or Barony of Eagle had its seat in Sussex, but derived its name from a Norman family named Aquila, or Aigle, from a town in

Normandy, Aigle, whence they came, so that the village in England derived its second name from a village in France. The first holder was Gilbert de Aquila of Pevensey, who had other possessions in other counties. The "Honour" passed afterwards to the Crown, and was regranted by Edward II. to the family of Lovel. From the Lovels it passed through an heiress to the family of St. Maur, and from the St. Maurs, again through an heiress, to William Zouch, whose son became Lord Zouch. His descendant, John Lord Zouch, sold it in the 36th year of Henry VIII. for £40 to Thomas Sydenham, who will be spoken of hereafter.

After changing hands several times, the manor was bought by an eminent barrister, William Draper West, afterwards Puisne Judge of the Queen's Bench, and ultimately Chief Justice of the Common Pleas, who was raised to the Peerage in 1829, as Baron Wynford, of Wynford Eagle. It has thus descended to its present possessor, Lord Wynford. Not now the manorial residence, it is occupied as a farmhouse.

The picturesque, grey, ivy-grown old house is still standing, little altered from its original state. It lies in a hollow, sheltered by the downs and upland pastures, and is a pleasing specimen of a small seventeenth-century manor-house. The front is composed, as usual, of three parts, each surmounted by a gable. The projecting central block contains a recessed

porch with stone benches. The wings recede and are pierced with old mullioned windows wrought in very hard stone, and perfectly preserved. The whole building is very solidly constructed of stone and flint.

A thick growth of ivy covers the whole front, and makes it difficult to decipher the date carved on the central block, but it appears to be about 1630, so that the house would have been built by Sydenham's father.

On the summit of the central gable an eagle carved in stone declares the ancient name of the house. This bird, however, is of modern workmanship; the old eagle of the Sydenhams, headless and maimed, may be found in a back yard. The old walled garden and a large orchard beyond appear to be quite in their original state. The whole house appears small, having perhaps once been larger; and it stands in an awkward relation to the road, which must formerly have taken a different direction. The interior is almost entirely modernised, but one old oak room, beautifully panelled in the Jacobean style, remains to tell of its ancient dignity.

The little church of Wynford Eagle is a chapelry belonging to the mother church of Toller Fratrum, two miles off. The original chapel must have been of great antiquitity, as it contained portions of supposed Saxon architecture. The Sydenhams, we are told, erected a building on one side of it for a family

burial-place, and there most members of our physician's family were laid. But the old chapel with the tombs of the Sydenhams has been entirely destroyed, not a vestige of it remaining. The poor little modern structure, built in 1840, does not even stand on the same site, and has only a fragment or two of the old chapel built into its walls. Thus of the old family which interests us hardly a trace remains in their ancient and dignified home. Their name is preserved only in one field, which still goes by the name of "Sydenham's."

The surrounding district, without being notably picturesque, presents a rich and pleasing English landscape. Its centre, of course, is Dorchester, a place of ancient fame, and having been—as its name implies, and some remarkable remains of antiquity testify—an important military station in Roman times. This importance was probably due to its proximity to the seaports of the Dorset coast, once busy and flourishing, though deserted by the course of modern trade. As, however, the history of epidemics is an important feature in the life of Sydenham, we may recall the fact that the greatest of all recorded epidemics, the Great Pestilence or Black Death of the fourteenth century, first reached our shores at a Dorsetshire seaport.

The proximity of Wynford Eagle to Dorchester was also important in another way, since the fact had great influence in determining the political sympathies of the Sydenham family, and thus in affecting the

course of our physician's life. Dorchester was strongly Puritan. Clarendon says "a place more entirely disaffected to the King England had not," and "it was the magazine whence the other places were supplied with principles of rebellion." This was doubtless true not only of the town itself but of the surrounding district. Sydenham was thus brought up in an atmosphere of Puritanism, or rebellion, as Clarendon calls it, and it is worth while for a moment to consider what this meant.

We can gain from Mrs. Hutchinson's life of her husband, Colonel Hutchinson, a very clear notion of the reasons which determined conscientious men to side with the Parliament against the King. There were political grounds and religious grounds. Politically, such men protested against the assumption of absolute power by the King, upholding the old English principle that the sovereignty of the State does not reside in the Crown alone, but in Crown and Parliament. On religious grounds, this party desired to make the English Church approximate more closely to the Reformed Churches of the Continent and of Scotland, regarding the changes which had been made at the English Reformation as incomplete or inadequate. But some who felt deeply on the political question, Mrs. Hutchinson tells us, had less sympathy with the religious aspect of the controversy—that is, they were more Parliamentary than Puritan.

On the other hand the Royalists, or Cavaliers, with equal conscientiousness, took entirely opposite views both political and religious. They considered their loyalty to the King to be paramount over all other political considerations, and if the Parliament differed from the King, that was flat rebellion. On the religious side they had no desire to see the Church of England made more decidedly Protestant; they clung to the Episcopacy, with the ceremonial and other features of the old Church which the Reformation of the preceding century had spared and which were strongly supported by the King.

The views of the two parties were totally irreconcilable, but it is clear that conscientious men might be found, and were found, on both sides.

The Sydenham family were evidently both Parliamentary and Puritan; and it seems that an unusual number of county families in Dorset were on this side. They were termed by their opponents "Rebels"; the term "Roundhead," which originated in another part of the country, being rarely, if ever, used in the Dorsetshire pamphlets. In its literal sense, the latter nickname would have been hardly applicable to our hero, for Sydenham, like Cromwell, Milton, Hutchinson, and most of the Puritan leaders of whom we have portraits, wore his hair long.

It can hardly be thought an unimportant matter to which party Sydenham belonged. We cannot appreciate his whole character and career without

remembering that he was imbued with the intense earnestness of the Puritans, and was quite prepared, in opposition to authority of any kind, to be called, if necessary, a rebel.

THOMAS SYDENHAM

I

Early Life and Education

THOMAS Sydenham was born at Wynford Eagle, and baptized September 10, 1624. He was the fifth son of William Sydenham of Wynford Eagle, and Mary his wife, daughter of Sir John Jeffery, Knt., of Catherston. Without necessarily supposing that genius is the result of external influences, or of hereditary transmission alone, the various factors which make up the antecedents and surroundings of a man of genius are well worth studying.

As regards antecedents the family history of Sydenham is very interesting. The family is first recognised at Sydenham, North Petherton, near Bridgwater, Somerset, which manor was held by Robert de Sydenham in the time of King John. From his time onward a pedigree is traceable, which has been

carried on up to the present day and displayed in great detail by some living descendants of the Sydenham family. It forms a large printed sheet with some hundreds of names, which we have been allowed to inspect, and from which many interesting facts may be collected.

In the Middle Ages we find that the family contributed some distinguished names to the national annals. One Richard Sydenham was judge of the Common Pleas in the time of Richard II.; Simon Sydenham was Bishop of Chichester in the reign of Henry V., and went on an embassy to the Emperor. Numerous knights, members of parliament, sheriffs and other dignitaries issued from the family; and amongst their alliances it is interesting to note that a daughter of Sir George Sydenham, of Combe Sydenham, in Queen Elizabeth's time, married Sir Francis Drake.

The main branch of the Sydenham family remained in Somersetshire, where they occupied seats at Brimpton, Aller, Chetworthy, Orchard Windham, and Dulverton. A few words may be said about their families before we pass to the branch from which our physician was descended. The Brimpton branch received a baronetcy, which became extinct in 1743. The Chetworthy branch was noted in the seventeenth century for its attachment to the Royal family. Three of its members were knighted. The best known, Sir Edward Sydenham, fought with

Charles I. at Oxford, but afterwards compounded for his estates and even became a member of the (Parliamentary) Council of State ; but was removed in 1651 for suspected complicity with the Stuarts.

An heiress of the Sydenhams of Orchard Windham, married Sir John Windham of that place and of Fellbrigge, Norfolk, and was thus an ancestress of the distinguished Windham family, one of whom, Sir William Windham, was a Secretary of State under George I. He left a son, Sir Charles Windham, also a statesman, who became Earl of Egremont ; but the title became extinct in 1845.

The Dulverton branch has left the largest number of known descendants, among whom we find the Rev. Humphrey Sydenham, called the silver-tongued preacher, a noted Anglican divine of the seventeenth century ; and a Colonel William Sydenham, who fought in the civil wars on the opposite side to his namesake, Colonel Sydenham, the brother of our physician.

In the eighteenth century we find Floyer Sydenham, the learned Platonist, who published the first English translation of Plato, a version at one time much valued. In later times we note among the Sydenham decendants the late Professor Williamson, the naturalist, of Owens College, Manchester, and Mrs. Mary Everett Green, the learned and indefatigable editor of many volumes of the State Papers, to whom all historical students are so much indebted. To this

lady's researches also is due a great part of what is known about the Sydenham pedigree. Other names more or less known in literature or in the public services might be mentioned, and many descendants of this family are still living.

Those who have any belief in hereditary genius or talent will be interested in a record which shows so many members of one family distinguished in arms, statecraft, or letters.

We now pass to the branch of the family to which our physician belonged.

The Sydenhams first appear at Wynford Eagle in the person of Thomas, the third son of Richard Sydenham of Aller, Somerset, who, as already stated, bought the manor of Lord Zouche. Nothing is known of this William Sydenham but that his mother, when a widow, made her will early in the fifteenth century, intending to make a pilgrimage to the Holy Land, or at least to visit the tombs of St. Peter and St. Paul, but died before carrying out her design. This was not the last instance of strong religious feeling in the Sydenham family. Thomas Sydenham bought a farm and manor formerly belonging to the estate of the Abbey of Cerne, and is mentioned in the reign of Queen Elizabeth as the possessor of a park called Wynford or Sydenhams, to the extent of 160 acres, beside considerable rights of sheep pasture. So that the property was an important one. His great-great-grandson William was the father of our Sydenham.

He was born in 1593 and died in 1661. All we know about him is that he was of Puritan leanings and strongly supported the cause of the Parliament, so that, when an elderly man, he fought in the Parliamentary army with the rank of Captain, and was for some time a prisoner to the Royalists. He married, November 4, 1611, Mary, the orphan daughter of Sir John Jeffrey of Catherston, deceased six months before. Of this lady nothing is known beyond the circumstances of her death, to be afterwards mentioned; but we naturally try to learn something about her family. Her father must have been a gentleman of wealth and good position in the county, though the mere fact of his having received knighthood in the first year of James I. does not perhaps prove very much, since at that time knighthood was regarded by many country gentlemen more as a burden than as an honour. His tomb at Whitchurch Canonicorum is described as "a fine altar tomb with canopy." It is recorded that his son George, Mrs. Sydenham's brother, died at the age of thirty, after a long illness, "with firm faith in Christ." His epitaph expresses more than a conventional amount of religious sentiment, and the phraseology strikes one as somewhat Puritan, so as to imply that Sydenham's mother came of a pious family; the more so as the monument was placed by the Sydenham family. George Jeffrey is described as "esquire," which at that time would indicate that he was the eldest or only son. The

family of Jeffrey does not further appear in Hutchins' History of Dorset, and it is possible that Mrs. Sydenham was the last representative of the family, though it is not stated that she was an heiress.

William and Mary Sydenham had born to them seven sons and three daughters, whom it may be desirable, for the sake of clearness, to enumerate.

(1) William, the well-known colonel and Cromwellian, baptized 8th April, 1615, buried 1st August, 1661.

(2) Francis, major in the Parliamentary army, born (or baptized) 24th April, 1617; killed in the wars, 10th February, 1644–5.

(3) John, born 26th April, 1621; died young.

(4) George, died 5th September, 1629.

(5) Thomas, baptized 10th September, 1624; died 29th December, 1689.

(6) John, major in the Parliamentary army, born 3rd March, 1626; killed in the wars in Scotland, and buried 7th May, 1651.

(7) Richard, Civil Commissioner under the Commonwealth and Protectorate; date of birth not recorded; buried 27th January, 1657. He is described in the Register as "Captayne," but his military service, if any, cannot be traced.

The daughters were :—

(1) Mary; married Richard Lee.

(2) Elizabeth, born in 1619; married Roger Sydenham, a distant cousin.

(3) Martha, born in 1622; married William Laurence.

It is noticeable that the Sydenhams, at least the sons, were a short-lived family. Only one beside Thomas, namely, William, lived to be over forty; and in 1661 Thomas Sydenham, then thirty-seven years old, was the sole male representative of the family. The dates of death of his sisters are not recorded.

It may be convenient before going further to say something about the character and career of Sydenham's brothers, since they had a great influence upon the life of the physician, and must have helped to mould his character.

William, the eldest, was educated at Trinity College, Oxford, but does not appear to have taken a degree. He was not a literary man, but must have been a fair scholar, for a letter of his dealing with military matters addressed to Sir Lewis Dives, which has been preserved, is curiously full of Latin quotations. That he possessed great energy and also military ability is undoubted. During his military career he was spoken of by the Earl of Essex, the Parliamentary commander, as "a gentleman of approved courage and industry;" and he lived to be eulogised by Milton as one of the counsellors of Cromwell. Strongly disposed to the Parliamentary party by family ties, he became still more closely connected with the Puritans by marrying the daughter of John Trenchard, or

Warmwell, an important Dorsetshire gentleman who was a staunch supporter of the Puritan party, being an original member of the Long Parliament for Wareham and named one of the King's judges, though not actually a regicide. The influence of this strong and masterful character on his brother Thomas, who was nine years younger, must have been considerable.

Sydenham had before him another example of the Puritan soldier in his next brother Francis, who never went to the University, but afterwards became a daring and energetic officer, one of the most active leaders of the Parliamentary party in Dorset, though his particular services are with difficulty separated from those of his brother William. The early death of Francis Sydenham at the taking of Weymouth, where Thomas Sydenham was also present, was one of the sad events which cast a shade over the Sydenham family.

The further careers of these brothers will be noticed in the following pages. At the time we are now considering they were living the ordinary life of young country gentlemen, busy probably, for the most part, with farming and field sports; though, if we judge by their subsequent life, setting an example of manliness and sincerity.

It was thus under the influence of a conscientious father, a pious mother, and manly elder brothers that Sydenham's boyhood was passed.

We have already said something about the external

home of the Puritan gentleman's family; its connection with the Sydenhams did not last for many generations after our physician's time.

To anticipate a little, we may here state that the family estate passed on the death of the elder Sydenham to his grandson, William, the eldest son of Colonel William Sydenham, whose line became extinct with his death, in 1718. The estate passed out of the family in a not very creditable manner, which is thus related.

"This William Sydenham put up the estate at a private lottery. It was generally supposed that there was a trick designed, for it was contrived, or at least hoped, that the fortunate ticket would fall to the share of a confidant of the family, who they imagined would have been prevailed upon to return the estate for a small consideration. That ticket happened to be hers; but, to their great disappointment, she immediately afterwards married Doily Mitchell, Esq., who sold it to George Richards, of Longbredy, Esquire. But it being necessary that Mr. Sydenham and his two daughters (his sons having died during his lifetime) should make a formal surrender of the estate to the vendee, on their refusal they were committed to Dorchester prison about 1709, where they ended their days."

In this dignified and beautiful home was Sydenham brought up. We know nothing of his early life, and very little of the friends and connections of the family

except that the other county families with which they were most closely allied were evidently of a Puritan way of thinking.

It is equally impossible to discover anything definite about his early education. He must of course have received some classical education to fit him for the University, but where this was received is unknown. Close at hand was the old Grammar School or Dorchester, and further off the more celebrated school of Sherborne; therefore he may have been a pupil at one of these. On the other hand it would have been equally consistent with the customs of the country gentlemen that there should have been a tutor living in the house, or that the Sydenham boys should have learned their Latin from some clergyman in the neighbourhood. Then, as now, there were many learned clergymen in country parishes who combined high thinking with plain living. The name of one such divine has been preserved, whom Sydenham long afterwards spoke of as having been "his intimate friend and countryman"—Gilbert Ironside the elder, Rector of Winterbourne Bassett, near Wynford Eagle, and afterwards Bishop of Bristol. There is no other record of his connection with the Sydenham family, but the existence of such men in the surrounding parishes shows that gentlemen's sons would have had no difficulty in obtaining the rudiments of a classical education.

In his eighteenth year Sydenham was sent to

Oxford. The selection of this University for a Dorsetshire man was almost inevitable, and his eldest brother had already been a Fellow Commoner of Trinity College in that University. The college selected for Thomas was Magdalen Hall, where he matriculated as a Fellow Commoner on May 20, 1642.

Magdalen Hall was originally closely connected with, though not strictly speaking a part of Magdalen College, being the "Grammar Hall" intended for the elementary education of university scholars in grammar, but had gradually assumed an independent position. It is now merged into Hertford College. Originally a small society, it had rapidly increased in numbers during the early part of the seventeenth century, so that about 1625 it had no less than three hundred members. This increase seems to have been chiefly due to the high reputation of its Principal, John Wilkinson, Fellow and afterwards, under the Parliamentary rule, President of Magdalen College. Wilkinson was one of the chief leaders of the Puritan party in the University, and under his guidance Magdalen Hall became the great centre of Oxford Puritanism, which, notwithstanding the High Church reaction initiated by Laud, had still a considerable following in the University. These reasons sufficiently explain why Sydenham should have been sent to this as being the popular Puritan college, presided over by such a man as Wilkinson.

But Sydenham was not destined to profit very long by the studies of the University, or to sit under the sermons of Wilkinson. His University career was cut short at its outset, not for any personal reasons, but by the course of political events. In the summer of 1642 the conflict between the King and the Parliament was rapidly proceeding to its final rupture. Even before the time that Sydenham went to Oxford preparations were being made for armed resistance to the King. In May the Parliament called out the militia in defiance of the King's prohibition ; and at the very moment when Sydenham was entering at Oxford the trained bands of London were being drilled in Finsbury Fields. As is well known, all attempts at reconciliation were in vain ; and when on August 22nd the King raised his standard at Nottingham, the country was actually in a state of civil war. It is plain that this summer term was no time for quiet study ; and the crisis had now arrived when every Englishman had to ask himself on which side he meant to play his part. In Sydenham's case the answer could not be doubtful. His family connections and the state of political feeling in his native county placed him inevitably on the side of the Parliament. The University and city of Oxford being strongly in favour of the King, this was no place for his opponents, and Sydenham must have left Oxford some time in the summer, though precisely when we do not know. It could hardly have been later than the King's declaration at

Nottingham, and may very probably have been earlier, since even before that event Dorchester and Poole were being fortified by the partisans of the Parliament.

Anthony Wood, who does not display with regard to Sydenham his customary omniscience, merely says that he left Oxford without taking arms for the King, as the other scholars did. But Sydenham must have left with a much more definite intention of the opposite kind, and as, after the battle of Edgehill, Oxford became the King's headquarters, he could not return there till the first war was over.

We see, then, that though it is quite correct to say that Sydenham entered the University in his eighteenth year, this step had little or no real influence on his education. His stay at Oxford cannot have exceeded two or three months, in a disturbed state of affairs, so that he must have learned little or nothing, and as regards University training this period was virtually a blank. His real University education began much later and under very different circumstances.

We have now to follow him into one of the most active centres of civil war. We shall find him, still almost a boy, playing the part of a soldier in the most memorable conflict of arms and opinions at once in which Englishmen have ever been engaged. In discussing these great and stormy events, it is difficult for any Englishman, even at the present day, to avoid being in some degree a partisan. The historian, it is true, professes to aim at being, and doubtless in a large

measure succeeds, in being impartial ; and this is no less the duty of one who assumes the humbler office of a biographer. But it must be admitted that in the case of the latter a stronger effort and more diligent circumspection are necessary to preserve a rigidly impartial attitude. In one who undertakes to write the life of a great man, the object of his warm admiration, it would argue a certain want of human nature if he were not, generally speaking, on the side of his hero. If, therefore, in the following slight sketch of certain episodes in the Civil War things are looked at as they would have been looked at from the Sydenham point of view, let not those whose views are different take offence. We all recognise that there were " heroic Puritans " and " heroic Cavaliers " ; but it will not appear strange if in the life of Sydenham more is said about the heroic Puritans than about their rivals. To the Sydenham family, as to many others on their side, the matter was a question of conscience.

II

The Fighting Sydenhams

WHEN Thomas Sydenham left Oxford in the summer of 1642, his University career checked at the outset, he found his native county in a state of active preparation for war. Political feeling was strong there, and was mainly on the side of the Parliament. Dorchester especially is spoken of by Clarendon as the most "malignant" (*i.e.*, Puritan) place in England. Even before Charles I. had raised his standard at Nottingham, men were drilled and mustered in Dorsetshire to support the Parliament. In August Dorchester and Poole were fortified, to guard against a suspected design of the Marquis of Hertford to seize them for the King, and shortly afterwards soldiers and ammunition were sent down by the Parliament, which also contributed to the expense of fortification. In these proceedings it is probable the Sydenham family took part, but we find no definite record of their being employed on the Parliamentary side till April, 1643, when the eldest

brother, William Sydenham, received a commission as captain of a troop of horse, his position in the county, and probably the proof he had already given of energy and capacity, enabling him to dispense with passing through any inferior rank. His rise was rapid, for in December of the same year he became a colonel. The military service of Thomas Sydenham must have begun in the same year, but we do not find him mentioned till the next year, 1644, under circumstances which will be spoken of later.

It is curious to remark that the very fact of Sydenham's having served in the Parliamentary army, though always established by direct contemporary testimony, has been strangely obscured and even denied in later times. In the great biographical dictionary of the last century, the "Biographia Britannica," the direct testimony of Sir Richard Blackmore, who knew Sydenham well, is flatly contradicted, without any reason, and all succeeding biographers have only touched the subject as if with the tips of their fingers. The motive in all this has been to clear Sydenham from the imputation of having been a soldier of the Parliament and Commonwealth. But that Sydenham did embrace the Puritan cause with earnest conviction, and when engaged in the quarrel, quitted himself like a man, is abundantly proved, not only by more diligent reading of the old books, but by official documents which have come to light and been edited of late years.

Before speaking of the future physician's military career, it will be well to get some general view of the circumstances under which it was passed. In the *first war* (a distinction to be carefully noted) Sydenham's activity was limited to his native county of Dorset, where the Civil War had certain noticeable features. To begin with, it was remarkably local, having no connection, or very little, with the great campaigns by which the main issue of the war was decided. The Dorsetshire forces do not appear to have left their native county or its immediate neighbourhood. But an internal conflict was constantly maintained there, and owing to a curious sequence of events was never terminated by any decisive victory. The field of battle was too remote from the great theatre of war for either of the contending parties to concentrate any great force there except in some transitory emergency.

The county was consequently divided. Each party possessed some of the strong places; there was a continual succession of attacks and reprisals, and it was not till the coming of Fairfax and Cromwell in 1646 that the county was completely gained for the Parliament.

At the outbreak of the war nearly the whole county was on the side of the Parliament. The only strong place held for the King appears to have been Corfe Castle, which sustained a memorable siege by the Parliamentary forces, in which one of the Sydenham

family held an important command. But in the summer of this year the taking of Bristol by Prince Rupert, July 27, 1643, not only spread consternation through the western counties but set free the successful army for further conquests.

Immediately after the surrender of Bristol a large Royalist force under the Earl of Carnarvon and Prince Maurice overran the county.

Dorchester, "the great seat of disaffection," as Clarendon calls it, a town ill adapted for defence, notwithstanding its new fortifications, surrendered in a panic; Weymouth and Portland soon followed its example. The siege of Corfe Castle was raised, and the whole county was reduced with the exception of two small towns, Poole at one end of the county, Lyme at the other, which, when summoned to surrender by Prince Maurice, "returned so peremptory an answer to the Prince's summons that he resolved not to attack them," and returned to press on the siege of Exeter (Clarendon).

Poole is of interest to us, as subsequent events there are frequently associated with the names of William or Francis Sydenham. Lyme has no connection with our story.

The Parliamentary party was, however, only checked, not destroyed. Vigorous efforts were made, and with partial success, to win back some of the towns and strong places from the Royalists. In the year 1643 the advantage was distinctly on the King's

side, but the excesses of the Royalist soldiers stirred up a strenuous opposition and brought into the subsequent struggle a bitterness of feeling which is recognised and accounted for by Clarendon. The Royalist historian states that after the capture of Dorchester and Weymouth the King's party, "taking advantage of the great malignity" of these places, used great license. The Earl of Carnarvon, one of the King's generals, a high-minded Royalist who shortly afterwards fell with Falkland at the battle of Newbury, was so indignant at the non-observance of the articles of surrender by his own party that he quitted his command and went off to join the King before Gloucester.

These things must be borne in mind if we find the subsequent fighting in Dorsetshire to show a somewhat bitter spirit, the population generally being on one side, the soldiery on the other. Later on the notorious Goring (to use the words of a Royalist historian), a man whose riotous excesses brought so much discredit on the royal cause, carried "licence" to a higher pitch.

The fighting which for the next two years harassed the county was not exactly what is described by the conventional phrase, guerilla warfare. It rather resembled the state of things on the Scottish border with which Scott has made us familiar. Each of the two parties possessed certain strongholds, from which the leaders sallied forth, with small bodies of daring

horsemen, to intercept supplies, to cut off convoys of ammunition, to threaten or assault hostile castles and manor-houses, sometimes to levy contributions on contumacious towns or tradesmen; or occasionally with larger forces to lay serious siege to one of the enemy's fortified towns. On neither side could the forces be regarded quite as regular soldiers; they followed no doubt their natural leaders, the country gentlemen, whose raids and skirmishes resembled on a smaller scale the border forays of the Howards, the Percies, the Johnstones, and the Douglasses. Their deeds of daring were never sung; only recorded, if at all, in the baldest of prose; for the Cavaliers did not any more than the Puritans encourage the making of ballads. But for any one desirous of finding fresh material for that style of poetry, the keen fights and hazardous escapes recorded in the old pamphlets might offer many promising themes.

So much it seems worth while to say in order to show what kind of military life it was in which these stormy years of Thomas Sydenham's youth were passed; but of the actual events of this provincial campaign a few only can be mentioned.

FORAYS OF THE SYDENHAMS.

As might be expected, many of the daring deeds on the Puritan side are set down to the Sydenhams. Thus Vicars, the enthusiastic Parliamentary chronicler, relates how William Sydenham, setting out from

Wareham to attack Dorchester, apprehended the Deputy Governor and his lieutenant, who had been very active against the Parliament, and breaking open the prison freed such honest men as had been committed by "those cruel cormorants." There also he met with a cart laden with muskets and gunpowder, bound for Bristol. The gunpowder he threw into the river, brake 200 muskets, and took away as many as his men were able to carry. He also borrowed there of one Mr. Cokar, a "malignant" goldsmith, such plate as he had ; and all this he did in an hour and a half, and returned safe to his garrison at Wareham. A little before this he went into the Isle of Purbeck and carried away from thence 323 cattle of all sorts. On another occasion he had "a brave bickering" with Sir Lewis Dives's forces, taking forty prisoners, and 100 horses, &c.

The Royalists on their side had, of course, the same tale to tell ; and the Royalist journals record successful skirmishes and attacks, with similar results in the capture of prisoners, arms, and booty. For instance, on November 21, 1644, Sir Lewis Dives set out from his castle of Sherborne to dislodge a party of rebels coming from Poole, who had posted themselves at Blandford. Having succeeded in this, he marched to Dorchester, and hearing that a large body of the rebel horse was in the neighbourhood, attacked them with a much smaller force, and put them to flight. Next day he returned in triumph to Sherborne, having

increased his numbers by this march, besides horses, arms, and prisoners taken from the enemy.

Cavalry raids and skirmishes of this kind were constantly going on; and one sees that the flat, heathy country of eastern Dorset, not much enclosed in the seventeenth century, would have been very suitable for this kind of warfare. In these affairs the losses do not seem to have generally been severe, but there were some more sanguinary engagements like that now to be spoken of.

We first hear of the activity of the Sydenham family in 1643, in connection with the obstinate defence of Poole. It was apparently William Sydenham who, when in the garrison there (though not governor), led the Royalists under the Earl of Crawford into a disastrous ambuscade. Having been tampered with by Royalist emissaries, and offered heavy bribes if he would betray the town, Sydenham adapted the familiar device of pretending to entertain their proposals. Lord Crawford fell into the trap, and it was agreed that if he came on a certain night with his forces the town gate should be secretly opened. The Royalists came at the appointed time, and the gates being silently opened they entered without suspicion. But when most of the force had passed in the gates were closed, and the Royalists found themselves exposed to a terrible fire of musketry and artillery. Many were made prisoners, many were killed, while some fought their way out. The

Royalists were saved from total destruction only by the error of the garrison of Poole in having closed the gates a little too soon, and by the fact that the Parliamentary artillery was found to be badly placed so that the cannon balls passed over the heads of the enemy. Lord Crawford had a severe lesson, while Sydenham's combination of craft and fidelity gained him great applause from his party.

Though at the end of 1643 Dorset, except Poole and Lyme, was almost entirely subject to the Royalists, the face of affairs was completely changed in the next year. The Earl of Essex, marching through on his ill-starred expedition to the West, easily recovered Dorchester and Weymouth. The former town was judged incapable of defence. The latter, with Melcombe Regis, as the lower town was then called, was put by Essex under the command of Colonel William Sydenham. Other names, one of them that of his brother, Major Francis Sydenham, are mentioned in the original warrant, signed and sealed by the Captain-General of the forces of the Parliament, June 22, 1644, which is still in the British Museum. At the same time Colonel Sydenham was put in command of three troops of dragoons, and a foot regiment of the nominal strength of a thousand men. He built some kind of fort in the upper town, and made Weymouth his headquarters. His occupation of this place must be borne in mind, as it will be the central point in our short history of the Dorset campaigns.

In the meantime the stage was cleared by the departure of the two greater armies. Essex with his forces pursued their march towards the West and compelled Prince Maurice with the King's army to evacuate Dorset. A Royalist garrison was, however, left in Wareham, which had some bearing on our history.

Whoever looks at the map of Dorset will see that Wareham is not far from Poole and lies on the way from that town to Dorchester. But in its political sentiments Wareham was totally opposed to Poole, being strongly Royalist, so that later on when it came into the power of the Parliament, after an obstinate resistance of the townsmen, it was even proposed to raze the refractory town to the ground.

The Royalist leader left in command at Wareham in July, 1644, Colonel O'Brien, an Irishman, brother of Lord Inchiquin, was not disposed to sit down quietly and await an attack. He assumed the offensive, and set out on his side to attack Dorchester in the month of July, 1644. He was encountered by Colonel and Major (Francis) Sydenham with their garrison of Weymouth, and sustained a severe defeat. The Sydenhams pursued the Royalists almost to the gates of Wareham, and took 160 prisoners, among whom were eight Irishmen, of whom more hereafter. What most concerns us is that "*old Captain Sydenham* (probably the father), who had been prisoner a long time to the Royalists in Exeter, behaved himself very bravely in

this action," serving with a lower military rank than his sons ; and Thomas, though a young soldier, was probably also present. In the county history the word "old" is omitted, and this at first led the present writer to believe that Thomas Sydenham was the captain referred to.

After this victory there is recorded an act of severity for which William Sydenham has been much blamed, and even by a recent biographer. The Irish prisoners of whom mention has been made "had such quarter given them as they gave the Protestants in Ireland"—that is, they were promptly hung. The fate of these poor Irish and of others of their countrymen at this period of the Civil War was very sad. Brought over from their native land to fight in a cause which was not their own, they found themselves deprived of the ordinary rights of war and treated as mere criminals. The excuse was the state of national feeling. The horror excited in England by the news of the terrible massacres in the Irish rebellion, the feeling that the King had been slack in punishing the rebels, and the suspicion (which after all was not confirmed) that he was going to bring over the ruthless Irish savages (as the English thought them) to fight against his own rebellious subjects, had worked up the national feeling to a pitch of wild excitement, only comparable to the intense feeling which in our time was stirred by the tales of the Indian Mutiny. The Parliament made a formal order that Irishmen taken in arms on

English soil should have no quarter. Sydenham's proceedings were, moreover, alleged to be a reprisal for the hanging of certain Parliamentary soldiers ; and thus led to further reprisals by Prince Rupert. Altogether it was an unfortunate business, but the national conscience and not the regimental commander should bear the blame.

This is the only occasion on which the Sydenhams could be accused of undue severity. On another occasion they interfered on the side of clemency, with consequences which might have had a very untoward influence on William Sydenham's career.

In the month of August Colonel Sydenham is found finally reducing the Royalist stronghold of Wareham, and on this occasion in association with Sir Anthony Ashley Cooper, afterwards Lord Shaftesbury, who, from his wealth and position in the county, took the leading part, and was at this time an active rebel ; though, as he himself confesses, he was not physically well fitted for a soldier's life.

For a time Ashley Cooper was the chief Parliamentary commander in Dorset, and on one occasion was in command of a force attacking the strong house of Abbotsbury, which was held by the Royalists. After once summoning the garrison, and on their refusing to surrender, he ordered that they should have no quarter, and even when the house caught fire, and the unfortunate Royalist soldiers were trying to escape, ordered them to be driven back into the flames.

This he states in the most definite manner in his autobiography. At the same time Colonel and Major Sydenham rode up at the other side of the house, and knowing or not knowing what was going on in front, admitted the Royalists to quarter and saved their lives; at the same time saving the Parliamentary party from a serious disgrace. This interference of the Sydenhams gave, however, great umbrage to Ashley Cooper and other officers, and was probably the occasion of the evident hostility to William Sydenham shown by certain gentlemen of Dorset. We find the "Dorsetshire Committee," among whom was Ashley Cooper, writing to the Council of State to recommend that Colonel Sydenham's commission should be cancelled and his regiment disbanded. But Sir William Waller, the chief Parliamentary general, spoke strongly in favour of Sydenham. The Council naturally followed his advice, and not only supported Sydenham, but made him commander of all their forces in Dorsetshire; his brother Francis being about the same time made commander of all the horse. This active officer is soon afterwards found in London complaining that he can get no pay for his men.

In this same summer there occurred a tragical and mysterious event in the Sydenham family. Their mother, Mrs. Sydenham, lost her life in the war, and, as is recorded by two contemporary authorities, was killed by the Royalists: it is said by a certain Major Williams. It is also shown by the parish register

that she actually died and was buried at Wynford Eagle about this time, in the month of July.

The circumstances under which a lady in her position was killed by the soldiers are quite unknown, and it is difficult to understand how such a thing can have happened. We can only conjecture that it may have been in an attack by the Royalists on Wynford Eagle, which in this war of raids and reprisals is not likely to have been unmolested; and that she must have in some way incensed the soldiers. A plausible conjecture, and one which has the merit of impartiality, since the blame stands to the account of the other party, may be suggested by the death of a lady at the hands of the Parliamentary soldiers, namely, at Cromwell's storming of Basing House in the following year. Mr. Hugh Peters, who gave an account of the affair to the House of Commons, reports, as may be read in Carlyle's "Cromwell," to the following effect: "In the several rooms and about the house there were slain seventy-four (men) and only one woman, the daughter of Dr. Griffith, who, by her railing, provoked our soldiers then in heat into a further passion."

Something like this may have been the fate of the Puritan gentlewoman. Of Mrs. Sydenham we know little but that she was the mother of four brave soldiers, two of whom gave their lives for the cause in which they fought. For a lady in her position to have thus exposed herself to the risks of war, she must have been either very courageous or very rash; but it is

not hard to suppose that the mother of four heroes was herself heroic. In the great tragedy of a civil war one such casualty counts for little, but for her own family it was a tragedy in itself, and had, as we shall see, further consequences of a tragic kind.

The adventure now to be related is told by one contemporary authority (Vicars) of Colonel William Sydenham, by another (Rushworth) as explicitly of the Major, Francis. It is impossible to say certainly which version is the correct one; we are inclined to think that Francis Sydenham was really concerned, since at this time William Sydenham was Governor of Weymouth, but as Vicars's narrative is the fuller, we shall follow that authority. Sir Lewis Dives, the Royalist leader who had been left in September of this year, 1644, with a garrison in Sherborne Castle, and was called Commander-in-Chief for the King in Dorset, set out on November 30th with a force from Dorchester to threaten Poole, where Colonel or Major Sydenham was then in command. The Royalists made (according to the Puritan chronicler) "a daring show and bravado," but finding Sydenham prepared to receive them, "drew off, and vanished like a vaporous cloud," marching straight back to Dorchester, which was then treated as an open town, and was at the mercy of whichever party might be superior in the field. Sydenham determined to retaliate and "show Sir Lewis Dives some action," drew out a party of fifty or sixty horse "double pistolled," and marched

that night to Dorchester, where he fell upon the enemy in their quarters, and drove in their "out-guards" or pickets. Then calling on his men for a charge, he beat Sir Lewis's regiment quite through the town. The Royalists rallied, and a second charge followed with equal success to the Parliamentary force. Then happened an occurrence which, even as told in the rough words of the old chronicler, rises to the height of tragedy.

When the Royalists rallied a third time Sydenham recognised in their leader a certain Major Williams, "who," it is said, "had basely and cruelly killed Sydenham's mother." For a soldier in the field to find himself confronted in arms by the slayer of his mother would be a crisis strange and startling enough to turn even a coward into a hero. It must have roused the Sydenham blood, which was not that of cowards, to an unexampled heat. What followed must be told in the words of the old narrative, since we can add nothing to them, nor have we the right to take anything away.

"So soon as Colonel Sydenham saw Williams he spake to his men that were next to him, to stick close to him; for said he, 'I will now avenge my mother's innocent blood;' and so he made his way to Major Williams, and slew him in the place, who fell dead under his horse's feet."

This is the story such as we have it. It is of course the statement of a partisan, but there seems no reason

to regard it as unhistorical; and with it closes the family tragedy of the Sydenhams.

If these tales of fighting and bloodshed should seem of little moment in the life of a physician, we should remember that this rough school of warfare formed a part of Sydenham's education. It was essentially a school of revolt, good or bad as we may choose to think it, and must have had a share in forming the character of one who brought into matters of thought and science the courage of a soldier and the independence of a rebel.

Only one more episode will be related, but it is one which, though insignificant in the great field of history, touched our family so nearly that it might almost be called the Sydenham epic.

THE LOSS AND RECOVERY OF WEYMOUTH.

Colonel Sydenham was now Governor of Weymouth and Melcombe Regis, and had two younger brothers, Major Francis and Thomas, with him in the garrison, when an event occurred which shows us our future physician actually in the field.

In the beginning of February, 1644–5, the Parliamentary garrison was in undisturbed possession, having no foes nearer than Portland Castle, where there was a Royalist garrison under Sir Walter Hastings, and Sherborne Castle, further to the north, held by Sir Lewis Dives. The place was well defended by two forts, one at least of which had been built by Colonel

Sydenham. But a plot was contrived by some of the townspeople to admit a force from Portland into Weymouth by treachery. Accordingly at midnight of February 9th the "Portlanders" were admitted into the town by some secret ways, and secured the forts with scarcely any resistance. Some of Sydenham's troops made a desperate attempt to recover them, but were repulsed with loss, and Major Francis Sydenham, who was doubtless in front of the fray, received a mortal wound, of which he died the next morning.

Let us quote the words in which Peter Joice, the "minister of the garrison," speaks of the Governor's brother, "whose memory," he says, "may not be buried with him. His death was no small joy to our enemies, to whom he was a perpetual vexation and terror, and no small grief to us who had our eyes too much upon him."

The next day at noon arrived Sir Lewis Dives, with horse and foot from Sherborne; and the Parliamentary garrison was compelled to evacuate Weymouth and retire to Melcombe, on the other side of the harbour, drawing up after them the bridge between the two towns.

Here the Sydenhams and their men were in a position of temporary safety, but Melcombe was regarded as untenable, being imperfectly fortified, and the garrison were thought, in Clarendon's words, to be no better than "prisoners at mercy." Sydenham,

however, at once set to work to strengthen his defences. The forts on the hill at Weymouth, especially the "Chapel Fort," commanded the position, and there was some cannonading and an attempt to burn Melcombe by red-hot shot; but, after a retaliation in kind by Sydenham, this method was discarded as being too dangerous to both towns. After a little while Melcombe seems to have been left pretty much alone by the Royalists, being regarded perhaps as harmless, or as being too strong to be taken by a sudden attack. It was, however, closely besieged, and apparently was not thought likely to be able to hold out long.

Colonel Sydenham, however, with dauntless resolution, held his ground and managed gradually to improve his position. He received supplies and reinforcements by sea from the Admiral (Lord Warwick) and others, and a troop of Parliamentary horse succeeded in finding their way in by land.

Here occurred a little skirmish which we must mention, because it gives us the only glimpse we get of Thomas Sydenham in the field. The Governor, Colonel Sydenham, sallying out with all his horse, unexpectedly encountered a troop of the enemy's horse, and completely routed them, taking sixty prisoners and chasing the remnant up to the gates of Weymouth. This was done without the loss of one man, only *the Governor's brother* being slightly wounded. Of course Francis Sydenham being now

in his grave, this brother could be no other than Thomas.

Next we hear that at the end of the second week came Lord Goring from Salisbury with a large force of Cavaliers, horse and foot, and faced the walls of Melcombe all one Sabbath day, but did not venture to attack or even to summon the garrison, a neglect which greatly astonished the besieged, and for which Goring was severely blamed by his own party. He retired after leaving some reinforcements with the garrison of Weymouth.

The end, however, was near at hand. Colonel Sydenham, with his restless energy, and favoured no doubt by the supineness of his adversaries, completely turned the tables upon them. The Royalists, being now stronger in the field, sent out some of their horse to bring in supplies. While thus engaged they were attacked by a Parliamentary force from Melcombe. The affair gradually became more important, and a force of infantry was sent out to support the Royalist cavalry. Colonel Sydenham, who was commanding in the field, saw that the garrison of the Chapel Fort must be seriously weakened, and seized his opportunity with the prompt decision of a born general. Riding back with a small force to Melcombe and throwing down the drawbridge, he hastened across and got on to the outworks of the Chapel Fort. Pressing his advantage, he entered the fort itself, and the garrison, surprised by an attack from an unexpected quarter,

surrendered in a panic, a large number being taken prisoners.

This brilliant success, which was gained on February 25th, practically secured for Sydenham the possession of the town of Weymouth and the other fort. But before the remaining positions were finally carried, Goring tried to make up for his previous supineness by a final effort to crush the Parliamentary garrison. Marching from Dorchester with a large force, he made a determined night attack upon Weymouth. Colonel Sydenham, who had received a warning of his approach, allowed the outworks to be easily carried, and received the attack in the streets with barricades defended by cannon. The Royalists charged gallantly, and got behind the main barricade, which was only saved by Sydenham in person rallying his men. At last, after two hours' fighting, in which they suffered great loss, the Cavaliers were compelled to retire, and the retreat became a flight. Sydenham, on the eighteenth day after the loss of Weymouth, was again in possession. Goring, after drawing out the Royalist garrison, marched off with all his force, to the great surprise of his adversaries, and to the great chagrin, as we are told, of the keen Sir Lewis Dives, and finally left Dorsetshire altogether. Thus Colonel Sydenham was again Governor; and Weymouth, with Melcombe, remained in possession of the Parliament.

The loss and recapture of Weymouth, though not much noticed in the great histories, excited great

attention at the time. It was a serious blow to the Royalists, and a cause of great exultation to the Puritan party. The thanks of Parliament and a grant of £2,000 were given to the officers, soldiers, and seamen of Weymouth and Melcombe. Clarendon speaks with great severity of the conduct of the Royalist commanders, especially Lord Goring, whose soldiers only distinguished themselves by "horrid outrages and barbarities" and "unheard of rapine," without applying "themselves to any enterprise upon the rebels."

At this point the history of medicine must concern itself for a moment with a curious coincidence which political history would not stoop to notice—that is, an approximation quite unperceived on either side between two representatives of English medicine and English surgery respectively in this memorable siege.

Richard Wiseman, the most eminent English surgeon of the seventeenth century, sometimes called the Father of English surgery, was engaged as a surgeon on the King's side in the Civil War. During this period he was not present at any of the great battles (though later on he was at the battle of Worcester), but was attached to the army in the West of England, under the nominal command of the Prince of Wales, afterwards Charles II., and in this capacity served in Somerset, Dorset, and other parts with the Royal forces. He was present, as he himself records, at the surprise of the Weymouth forts by the garrison from Portland, and remained in the place

while it belonged to his party. At the very time when Colonel Sydenham's troops surprised the Chapel Fort, he had an adventure which may be recorded in his own words.

"I was dressing a wounded man in the town almost under the Chappell Fort, and hearing a woman cry, 'Fly! fly! the fort is taken!' I turned aside a little amazed towards the line, not knowing what had been done; but getting up the works, I saw our people running away and those of the fort shooting at them. I slipt down this work into the ditch, and got out of the trench; and as I began to run, hearing one call 'Chirurgeon!' I turned back, and seeing a man hold up a stumped arm, I thought it was an Irishman whom I had absolutely dismembered, whereupon I returned, and helped him up. We ran together, it being within half a musket-shot of the enemy's fort; but he outran me quite."

Evidently Wiseman had a very narrow escape. Now if Thomas Sydenham was, as is very probable, with his brother the Colonel on this occasion, they must have been within an ace of taking the Royalist surgeon prisoner. The circumstance would have had no particular interest for Sydenham, and certainly Wiseman could not have recognised in a young cavalry officer of nineteen, at that time not dreaming of becoming a doctor, the future reformer of medicine. But at this distance of time we can wonder at the curious irony of fate, bringing almost in presence of each

other two men opposed in politics, but both destined to adorn the same profession. In after years Wiseman practised surgery in London at the same time as Sydenham practised medicine there ; but the name does not occur among the numerous physicians mentioned by Wiseman in his works, and for various reasons it is not likely that they ever met.

From this time the conflict in Dorset became much less active, all the important places being in the possession of the Parliament ; though the strong castle of Sherborne, impregnable by such means as the Parliamentary forces possessed, still held out under the "inexpugnable" Sir Lewis Dives. But while there was any fighting going on we may be sure that the Sydenhams were in the thick of it. Sherborne was reduced by Fairfax and Cromwell in August, 1645, and after this there was no more fighting in Dorset, but we are not told that the forces were disbanded.

In the next year, the 20th of June, 1646, Oxford surrendered to Fairfax, and before the end of August, in Carlyle's words, "the First Civil War, to the last ember of it was extinct."

It is well known that at the end of 1646 and in the following year a large part of the Parliamentary army was disbanded, and we cannot doubt that among those who surrendered his commission, if he had one, was Thomas Sydenham. But there is no positive proof that he held any military rank in the first war. If he

did hold any it was probably that of cornet, not captain. The elder brother William was continued in the governorship of Weymouth for some time longer, and always retained the rank of colonel. He was next made military governor of Bristol, the second city of the kingdom, and colonel of the popular General Skippon's famous regiment; but not for long, as he soon became Governor of the Isle of Wight, and held besides other civil dignities, which had a great influence on his younger brother's career; but with these we are not now concerned. Thomas Sydenham had no part in them, and when he gave up military service, which would have been probably in the latter part of the year 1646, if not earlier, his only aim in life was to return to his University. On his journey thither he had a chance meeting and conversation with a physician, which altered the whole course of his life. The story shall be told in his own words.

III

Sydenham at Oxford. The Puritan Rule in the University

IN the letter of Dedication to Dr. John Mapletoft prefixed to the third edition of his work called "Observationes Medicæ," Sydenham makes a biographical statement which has been often quoted, though not always accurately, and is here given in a translation.

"It is now the thirtieth year since the time when, being on my way to London, in order to go from thence a second time to Oxford (from which the misfortunes of the first war had kept me away for some years), I had the good fortune to fall in with the most learned and honourable Dr. Thomas Coxe, who was at that time attending my brother during an illness; and then, as he has been up to the present time, practising medicine with great distinction. He, with his well-known kindness and courtesy, asked me what profession I was preparing to enter, now that I was resuming my interrupted studies, and was come

to man's estate. I had at that time no fixed plans, and was not even dreaming of the profession of medicine; but moved by the recommendation and influence of so great a man, and in some way, I suppose, by my own destiny, I applied myself seriously to that pursuit. And certainly, if my efforts have turned out to be of the least public utility, the credit must be thankfully referred to him who was the patron and promoter of my early studies. After spending a few years in the University, I returned to London and entered on the practice of medicine."

Now the work to which this letter is prefixed was finished December 30, 1675, and the dedication, being naturally composed when the book was completed, would have been written early in 1676, which is the date of the published work. It would therefore have been in 1646 that he returned to Oxford, but from the political circumstances it is clear that it could not have been till the end of that year, and in consequence of the unsettled state of the University it is not likely that many students returned even so early as that. It is possible, indeed, that there may have been a little vagueness of dates, and that he did not actually go into residence till 1647, which would not be inconsistent with Sydenham's own statement. He seems to have returned, in the first instance, to his old college, Magdalen Hall.

The next year, 1647, was a stirring period in the University. The Parliament, on May 1st, passed an

ordinance appointing Visitors, who were, of course, strong Puritans, to purge the University of all who refused to take the covenant, or opposed the ruling powers. The University made a vigorous and organised opposition, as they were clearly justified in doing, so that the whole of this year was occupied with disputes and conflicts, the result being that the work of subjecting the University to the Parliamentary rule was still very imperfectly accomplished. In March, 1648, however, the Earl of Pembroke, the Chancellor of the University, who had been dispossessed by Charles I., was sent down to Oxford, with a strong guard, so that finally the opposition was broken and all the heads of Houses and Fellows who refused to submit either resigned or were deprived of their places. Some three or four hundred Royalist members of the University were driven out, but it was not till the month of August that the work was brought to completion.

It does not seem likely that Sydenham had much time for quiet study during this distracted period, but his name appears on one or two occasions as a supporter of the Parliamentary Visitors, and on the 30th of September, 1647, he was appointed one of their delegates, as the representative of Wadham College. Sydenham was perhaps not satisfied with his old college. At all events, on the 14th of October, 1647, he entered as a Fellow Commoner of Wadham, as appears by the college registers. We may suppose

that his reason for selecting this college was that the celebrated Dr. Wilkins (a strong Presbyterian, though afterwards Bishop of Chester) was already designated for the headship of the College, in place of the Royalist Warden ejected by the Visitors. But as Wilkins did not come into office till April in the next year there may have been no connection. Sydenham himself referred in after life to his having been a member of Wadham. He says in 1687, writing to a Doctor Gould, a Fellow of Wadham, "I myself was once a Fellow Commoner of your house; but how long since I should be glad to know from you, as I remember it was in the year that Oxford was surrendered, though I had bin of Magdalen Hall sometime before." It is not, however, quite clear whether he speaks of the *military* surrender of Oxford to Fairfax in 1646, or the surrender of the *University* to the Commissioners in 1647.

It is, however, singular that the name occurs again in connection with Magdalen Hall. When the colleges were summoned by the Visitors to submit to their authority, each member of the college was asked individually whether he submitted. In the case of Magdalen Hall we find among the Masters of Arts "Mr. Sidnam, M.A." said, "I submit." There is no reason why this should not have been our Sydenham, the variation in spelling being of no consequence; and though there is no record of his taking the degree of M.A. he was officially recognised as having this degree

when admitted, long afterwards, a Licentiate of the College of Physicians, and must then have exhibited some evidence of it. Moreover, it was probably possible then, as in later times, for a man to have his name on the books of two colleges at once.

The story of Sydenham's medical degree, which is rather a curious one, has now to be told. When the Puritan party came into possession of the University, and had a number of vacant fellowships and other preferments to give away, there were a large number of students desirous of taking degrees who, from the disturbances of the times, had been unable to qualify themselves by the ordinary course of residence and of exercises in the schools (examinations in the modern sense being not then organised). To satisfy their aspirations and to provide a sufficient number of graduates for the vacant offices, a large number of degrees were conferred by "actual creation," as it is called. That is to say, they were given by direct vote of Convocation, sometimes subject to the candidate performing certain exercises, sometimes without any conditions at all. Often, or indeed generally, this was done in compliance with a recommendation (amounting to a command) from the Chancellor or even some other important person. When there was a king upon the throne he not unfrequently exercised this royal privilege of nomination. After the battle of Edgehill Charles I. ordered a number of degrees to be conferred

on his supporters—a transaction called by Wood "the Caroline creation."

During the King's residence in Oxford the same privilege was frequently exercised, and after the Restoration still more liberally. This right of conferring degrees by creation, always possessed by the University, though sparingly used in ordinary times, was lavishly employed by the acting Chancellor, the Earl of Pembroke. The degrees given on April 12, 14, and 15, 1689, by his command are called by Anthony Wood "the Pembrokian creation." Though political and personal interest had great influence in these degrees they were not conferred on unworthy persons. Dr. Wilkins, the Warden of Wadham above mentioned, was created Bachelor of Divinity the day before he was put into his Headship, and Dr. Wharton, the celebrated anatomist, owed his medical degree to the nomination of Sir Thomas Fairfax. It was generally considered decent to state the grounds of recommendation.

Sydenham, then, was actually created Bachelor of Medicine on April 14, 1648, by command of the Earl of Pembroke. Wood notes that he had not previously taken any degree in Arts, nor did he do so at any time; but we have seen there is a presumption that he possessed the degree of M.A., which he could have received by creation as easily as that of M.B. Probably it was conferred at a time when the registers were not very accurately kept, as is confirmed by evidence to be given later.

The modern reader may wonder a little that medical degrees, involving professional privileges, were conferred as readily as honorary titles in arts or law are given at the present day. But this was the custom. Sydenham could not at this time have made any serious study of medicine, having been barely a year resident in the University, and in a time of great confusion. He had thus the rare good fortune to obtain a degree at the beginning instead of at the end of his student's course. So much he owed to patronage. But if we consider the incalculable gain to the science of medicine involved in making Sydenham a doctor, we must admit that seldom has the blind Goddess of Patronage dispensed her favours with a happier hand.

It is possible that this business of the degree may have been hurried on in order to qualify Sydenham for an important preferment which he obtained soon after. On October 3, 1648, he was appointed by the Visitors to a Fellowship of All Souls' College, doubtless in place of an expelled Royalist. It is suggested that this place was obtained for him by the influence of his brother, the Colonel. Very likely this was so ; Sydenham was already *persona grata*, a favourite with the dispensers of patronage. In March of the next year he was appointed Senior Bursar of the College, and must thus have been in comfortable circumstances.

OXFORD UNDER PURITAN RULE.

Before continuing the story of Sydenham's life in Oxford, it will be well to consider for a moment the state of the University in his time and how it had been affected by the recent changes.

When Oxford surrendered to Fairfax at the close of the first war the University was completely disorganised, having been for nearly four years the seat of government, and occupied by a garrison ; so that the ordinary studies must have been suspended. The colleges had been occupied by courtiers and soldiers more than by students, and the few scholars who remained had been in some sort of military service. Both the University and the colleges were impoverished by their quasi-voluntary gifts to the King ; some of their buildings were in ruins, and there was, in Anthony Wood's words, "scarce the face of a University left."

It was necessary for the Parliament to deal with this state of affairs, and finding that the University authorities refused to comply, they had to be compelled in the manner already described. The chief change at first was one of persons. It naturally followed that those who refused to submit to the new rule were expelled, and it is not easy to see how it could have been otherwise, considering the political importance of the Universities.

No Government exercising its elementary duty of

self-preservation could tolerate its open enemies in academical seats any more than in ecclesiastic or civil offices ; and it should be remembered that during the Royal occupation the University had been thoroughly purged of all Puritan elements, only faithful Royalists being permitted to remain. The warden of Merton, Sir Nathaniel Brent (to take one instance), being absent and serving in the Parliamentary army, was very naturally, though not quite legally, deprived of his office by the King, who used his influence to procure the election of a more than worthy successor in the person of the great Harvey, destined to hold the Wardenship for one year only.

The important point was the character of the new men thus forcibly introduced, and there can be no doubt as to the eminence of many of them.

Anthony Wood has left an amusing picture of the new scholars, some of whom, coming from Cambridge, he calls "the dregs of the neighbour University," commonly called "Seekers." He ridicules their fondness for the sermons at St. Mary's ; their mortified countenances, puling voices and eyes lifted up ; their short hair, commonly called "the committee cut," and shabby attire, making them look rather like apprentices or antiquated schoolboys than academicians or ministers. All this was fair game ; but it is not safe to take a humorist like Wood too seriously. Among the importations from Cambridge were Wallis, one of the greatest English mathematicians, and Seth Ward the

astronomer, appointed Savilian professors in place of two unsubmitting Royalists. Among the "intruded" heads of houses was the "universally curious" Dr. Wilkins, Warden of Wadham, a man of vast attainments and marvellous ingenuity, as versatile in science as he was fickle in politics; destined in a short time to become the leader of the scientific movement in Oxford. At this time he was a Presbyterian minister, and soon afterwards married Cromwell's sister; but being what is called in modern times an "opportunist," managed to secure still higher patronage after the Restoration, when he was made Bishop of Chester.

Another of the Puritan heads of houses was Dr. Jonathan Goddard, Cromwell's physician, and made by him Warden of Merton in succession to Sir Nicholas Brent. He was a distinguished physician, afterwards Professor of Medicine in Gresham College, and who, even before he came to Oxford, had occupied himself in London with philosophical experiments. He is stated to have constructed with his own hands the first telescope ever made in England. It was creditable also to the Parliamentary Commissioners that they allowed Pocock, the great Arabic scholar, to retain his professorship, though he refused to submit.

A doctor by actual creation and an intruded fellow, like Sydenham, was William Petty, an economist far ahead of his age, and accomplished in many sciences: one of the most brilliant men of science ever born in

England. It is not easy to estimate the merits of theologians, since of their eminence party spirit is the judge ; but the new school was never held to be deficient in learning. The actual state of things in Puritan Oxford may be learned better from Wood's private diaries, published by the Oxford Historical Society, than from the peevish complaints which the downfall of his party naturally enough drew from him. We gain an impression of keen intellectual activity and strict discipline, with by no means a complete absence of amusement, for though songs and ballads were frowned on by the Puritans, instrumental music was much cultivated.

The ultimate result of the Puritan reforms in Oxford may be safely judged of by the unwilling testimony of Clarendon, who says :—

"It might reasonably be concluded that this wild and barbarous depopulation would even extirpate all that learning, religion, and loyalty which had so eminently flourished there ; and that the succeeding ill husbandry and unskilful cultivation would have made it fruitful only in ignorance, profanation, atheism, and rebellion, but by God's wonderful blessing the goodness and richness of that soil could not be made barren by all that stupidity and negligence. . . . *It yielded a harvest of extraordinary good and sound knowledge in all parts of learning ;* and many who were wickedly introduced applied themselves to the study of good learning and the practice of virtue, and had inclination to that duty

and obedience that they had never been taught. So that when it pleased God to bring the King back to his throne, he found that University abounding in excellent learning and devoted to duty and obedience, little inferior to what it had been before its desolation."

It was indeed superior in most of these good qualities, notwithstanding what is called its "desolation."

The general impression derived is that the new rule in Oxford was far from being a "Puritan desolation," or ruin, as is sometimes said ; on the contrary the University was soon in a condition of prosperity and remarkable intellectual activity. The Puritan discipline no doubt was strict, but in relation to the previous laxity and the immature age of scholars in those days we have no right to say that it was too strict. Sermons, no doubt, were more abundant than modern taste would relish. In the University church, in college chapels, on many week-days as well as Sundays, were sermons, which the scholars had not only to hear, but duly to transcribe, to an extent which would astonish a modern undergraduate. The disputations in the schools on theology and philosophy were well maintained, not in Latin only but often in Greek, which Wood observes was hardly or never known in later times after the Restoration, and which in these latest times seems almost incredible.

We might suppose that theological and scholastic disputations were not much to Sydenham's taste, but we find that he was deeply interested in divinity, and

even wrote a treatise on Rational Theology ; so that this side of Oxford studies seems to have left its mark.

Another side of the intellectual life of the University would not have been thought much of by Anthony Wood, but has turned out to be the most important of all. In Wadham College or in the lodgings of Dr. William Petty met a remarkable group of scientific men. The universally curious Warden was generally the host ; around him would be Wallis and Seth Ward and Petty, and that "miracle of a youth," Christopher Wren, whose budding genius was nursed in Wadham, but who became a colleague of Sydenham's as a Fellow of All Souls'. Dr. Thomas Willis, the anatomist, then practising in Oxford, though a Royalist and secretly an Anglican, would not stay away. Dr. Jonathan Goddard, Cromwell's physician, whom he had made Warden of Merton, was another member of the circle. Later, the great Robert Boyle, who came to live in Oxford in 1654, was added to the group which was the successor of his "Invisible College" in London. Robert Hooke, then Wallis's young assistant in chemical experiments ; Thomas Millington, from All Souls', a friend or Sydenham's, afterwards President of the College of Physicians, and Richard Lower of a younger generation, who co-operated in Willis's anatomical researches, were also connected with the meetings.

This scientific movement had indeed originated in

London during the early years of the first civil war Drs. Goddard, Wilkins, and Wallis had been the principal figures in a group or club of scientific inquirers—what the French call a *cénacle*—which used to meet sometimes at Goddard's lodgings, sometimes at Gresham College, or elsewhere, for mathematical and physical discussions. Two of these have been spoken of already. The third, Wallis, was in those days clerk of the Westminster Assembly, and was specially obnoxious to the Royalists because he had used his knowledge of cipher to give evidence against Laud on his fatal trial—a piece of service for which he was never forgiven by staunch Cavaliers like Anthony Wood.

Robert Boyle and Petty are mentioned as correspondents of this club, which, under the name of "The Invisible College," was the real embryo of the Royal Society. Its centre was partly shifted to Oxford about 1649, when Puritan patronage transferred Wallis to be a Professor there, and Wilkins and Goddard to be heads of houses. So that after this there were two groups, in constant correspondence with one another—the parent society in London, and the Oxford colony, called the Philosophical Society. As the movement has been strangely called "Anti-Puritan," it is necessary to draw attention to the strongly Puritan cast of the original group, and of most of the Oxford Society. The scientific impulse made itself felt in Oxford for another generation,

amongst its most conspicuous results being the anatomical and physiological researches of Willis, Lower, and Mayow. Then it somewhat unaccountably died away, but in London the corresponding movement gave rise to the formation of the Royal Society, founded after the Restoration.

One would like to think that Sydenham joined the Philosophical Society, and took part in the meetings at Wadham or at Petty's lodgings. But there is no evidence that he did so; the only link connecting him with the scientific circle being his friendship for Robert Boyle, and for Dr. Millington of All Souls'. There is even some presumption that he did not altogether sympathise with the philosophers, for when in London he never showed any interest in the advance of anatomy and physiology or the other objects of the Royal Society.

We get a vivid picture of Oxford in the days of "Puritan desolation" in John Evelyn's record of his visit there in 1654. He talks of the Acts performed at St. Mary's and in the schools, according to ancient custom: of a sermon from the famous Dr. Owen, "perstringing Episcopacy"; of the disputations of the doctors; the long speeches of the proctors and the Vice-Chancellor; the creation of the doctors by the old ceremonies of the cap, ring, kiss, &c., not yet wholly abolished; the excellent oration of Dr. Kendall, one of the Inceptors, abating his Presbyterian animosities; and even the "drolleries of the Prevari-

cators"[1] were not forgotten. In the Bodleian the visitors were shown the precious manuscripts, English and Oriental. The Physic or Anatomy School, adorned with some varieties of natural things, and the Physic Garden, with its botanical curiosities, were also visited. The colleges were profuse in hospitality. At Evelyn's old college, Balliol, the staunch Royalist was made extraordinarily welcome. At All Souls' he heard music, of voices and theorboes, performed by some ingenious scholars. In New College and Magdalen the Chapels were still in their ancient garb, notwithstanding the scrupulosity of the times; and in Magdalen was still standing the double organ (afterwards removed) on which Mr. Gibbon, the famous musician, gave a taste of his skill and talents. And above all he mentions the magnificent entertainment in Wadham given by his dear friend Dr. Wilkins, the Warden, who displayed his vast collection of curiosities and scientific instruments, belonging to himself and to that prodigious young scholar, Mr. Christopher Wren.

Evelyn went away well satisfied with the hospitality of Oxford, and has left us a favourable impression of the activities and the amenities of the University, where academical studies, though not less exact than

[1] *Drollery of the Prevaricators.* This was what Evelyn elsewhere calls an old facetious way of rallying upon the questions proposed in the disputations. It was replaced by the coarse buffoonery of "Terræ Filius," condemned by Evelyn on a later visit to Oxford in 1669.

in former times, seem to have been more varied and more modern. Whatever positive knowledge Sydenham may have gained in Oxford, he certainly had the advantage of living in a vivid centre of intellectual life.

The unquestionable success of the Puritan rule in Oxford seems to have been due to several causes. First, the steady discipline to which the scholars were subject, however irksome, would undoubtedly make for industry. Then the Commissioners exercised great care in appointing men of eminence to fill the professorships and chief places in the University, as well as in the selection of young men of remarkable promise, such as Wren, Petty, Sydenham, and Millington, with others afterwards eminent, to occupy the vacant Fellowships. The candidates recommended for degrees by the Chancellors (including Cromwell himself) would also form a striking list. Indeed, one is tempted to suppose that all these appointments were made with considerable regard to conscience. Another very important factor was doubtless the intellectual stimulus arising from the shock and agitation of men's minds, and the spirit of originality fostered by the breaking down of traditional landmarks; so that, as has often been noted in similar times of crisis, a period of keen mental activity succeeded to the political and military intensity of the Civil Wars. At all events it is quite clear that the speculative and scientific Renascence,

sometimes put to the credit of the Restoration, started, both in Oxford and London, under the Commonwealth and the Protectorate.

Little is known from actual evidence of Sydenham's pursuits during his Oxford residence, but one interesting story showing how he tried to make up for the deficiencies of his interrupted University course comes to us in a very indirect way.

In the diaries of Dr. Wm. Stukely (published by the Surtees Society) Stukely says he heard from Lord Pembroke that he had heard from Dr. Thomas Millington that he was chamber fellow with Thomas Sydenham at "Cambridge" (meaning Oxford) and told the following story. That when Sydenham had returned to the University after three years' absence he had forgotten his Latin, but recovered it by obstinate reading of Cicero, translating him into English, and then retranslating into Latin, correcting from the original.

Dr. Millington, afterwards Sir Thomas, Sedleian Professor of Natural Philosophy at Oxford, and President of the College of Physicians, was actually a fellow of All Souls' at the same time as Sydenham, being also appointed by the Parliamentary Visitors, and is referred to by Sydenham himself in one of his works as an intimate friend ; therefore the story seems authentic enough. Sydenham was always an admirer of Cicero, and according to Sir Hans Sloane kept a bust of him in his library.

Oxford at that time offered but scanty facilities for medical study. There was a Regius Professor of Medicine, whose duties were to read a lecture twice weekly on the text of Hippocrates or Galen. The professor in Sydenham's time was Sir Thomas Clayton, appointed in 1647, the successor of his father, also Thomas Clayton. Sir Thomas Clayton was also Warden of Merton, where he was always quarrelling with his fellows, but not otherwise eminent. As Sydenham was always a great admirer and reader of Hippocrates, though of no other medical classic, it is possible that Sir Thomas Clayton may have introduced him to the study of the Father of Medicine.

It is hardly necessary to say that there was no hospital for clinical instruction.

There was some regular teaching in anatomy, though the anatomical school had not reached that eminence which it attained later, in the hands of Willis, Lower, and Mayow. A readership in anatomy had been founded by Richard Tomlyns in 1623, and was virtually annexed to the Regius Professorship of Physic, being first held by Thomas Clayton the elder, and in 1647 by his son. It is noteworthy that in 1633 a small anatomical work, a reprint of the Institutions of Anatomy by Caspar Bartholinus, was printed in Oxford, probably as a text-book for the pupils of the Tomlyns reader. Sir Thomas Clayton, who held the chair in Sydenham's time, is said to have

had a weakness which entirely disqualified him for his office, namely, that he could not bear the sight of blood without fainting. However, he provided a substitute far better acquainted with anatomy than he was himself, Dr. William Petty. This remarkable man was accomplished in many sciences, though now known chiefly for his "Political Arithmetic," and other economical works, by which he is regarded as having founded the science of vital statistics or Demography. Evelyn said he had never known such another genius. He had studied anatomy on the Continent, probably at Leyden and Paris, since he is known to have discussed Vesalius with Hobbes of Malmesbury, when living in that city. The statutes prescribed only one dissection in the year, in Lent term, if a newly-executed criminal could be had; but we know from Wood's diary that the medical students got news of persons hung in Abingdon and other places round, and made arrangements to obtain the bodies for dissection.

One celebrated case, of a poor woman hung at Oxford, who was found when brought to the anatomy school to be not dead, and was recovered by the skill of Petty, made great noise at the time and was commented on in a rather well-known pamphlet, "Newes from the Dead, or the miraculous deliverance of Anne Greene, who being executed at Oxford, December 14, 1650, afterwards revived and by the care of certain physicians there is perfectly recovered." Several

gentlemen of the University, including Christopher Wren, Dr. Ralph Bathurst, and others, celebrated the event in Latin, English, and French copies of verses. This occurrence brought Dr. Petty more celebrity than his anatomical learning. Another similar event which is mentioned by Wood had a less favourable issue, the executioners ruthlessly insisting on finishing their work.

It is clear that Sydenham had the opportunity or acquiring that moderate knowledge of anatomy with which he was content, as he never attached much importance to this department of medical training.

The accomplished Dr. Petty also gave lectures on chemistry, which Sydenham might have attended. After acting as deputy Petty was afterwards appointed to the Tomlyn Readership in Anatomy ; Sir Thomas Clayton, with much good sense, resigning the office to make room for him. Petty, however, did not occupy the chair long, obtaining two years' leave of absence from his college in March, 1651, to be physician to the Parliamentary army in Ireland, and did not return to teach in Oxford.

Another branch of medical science, botany, was represented only by the Physic Garden, which was of considerable size and could show, in 1648, some six hundred species ; though, according to Evelyn, it contained, at the time of his visit, nothing very remarkable. It was certainly at that time inferior to what it

became a few years later under its excellent German curator, Bobart.

The account now given exhibits the whole of the medical education which Sydenham could have received in Oxford—a very imperfect curriculum according to our ideas; but he afterwards supplemented it by a more practical kind of study in Montpellier, which will be spoken of presently. In the meantime his University studies were interrupted by duties of a very different kind, as will be told in the next chapter.[1]

[1] It may be observed that what is now to be related seems inconsistent with Sydenham's own statement in his dedication to Mapletoft (page 50), that after spending some years in the University he returned to London. But, after the Restoration, all who had fought in the Great Rebellion were naturally reticent as to their exploits, and Sydenham could hardly have declared publicly that he had borne arms against the reigning monarch. He himself, it may be noted, never attributed the unpopularity of which he complained to this cause.

IV

Sydenham's Second Military Service—Marriage —Start in Practice

THE most authentic document bearing upon Sydenham's military services is a remarkable petition in his own handwriting, presented to Oliver Cromwell, then Protector, in March, 1653–4, which is still preserved in the Record Office (S.P. Interregnum, vol. lxvii. f. 37), and printed in Green's Calendar of State Papers (Domestic Series, 1654, p. 14). It is endorsed "Captain Sydenham's petition."

It seems best to give this interesting memorial entire, and then to show what conclusion can be drawn from it.

"CAPTAIN SYDENHAM'S PETITION.

"*To his Highness the Lord Protector of England, Scotlana, and Ireland.*

"The humble petition of Capt. Thomas Sydenham.

"*Sheweth:*

"That there was due to my brother Major John

Sydenham, slayne in Scotland, a very considerable arrear for sundry and constant services in England and Ireland.

"That your Highness Petitioner besides that he was legally entitled to the sayd arrears did furnish his sayd brother with divers sums of money to inable him to buy horses and other necessaries for his going to Scotland, for which your petitioner was never satisfied.

"That the severall papers which should certifie the aforementioned services, being all lost upon the death of the sayd Major Sydenham together with what else he had, your petitioner was made incapable in the ordinary way to recover what was due.

"That your Highness petitioner after a two years attendance on the Parliament for satisfaction, did applie himselfe to a Committee newly constituted for receiving petitions, who upon examination of his case did order that Mr. Carie Rawligh should report their sense to the Parliament, which was that satisfaction should be made him out of Irish lands, but your petitioner not being able to get on the Report till those Lands were passed away to Act, would not enjoy the benefit of that order.

"Your petitioner therefore most humbly prayes your Highness that your Highness will please in consideration of the faythfull and valiant services of your petitioners sayd brother, to order such satisfaction as in your Highness piety and wisdom shall be thought fit to be made to your petitioner, who hath likewise

himselfe faithfully served the Parliament with the loss of much bloud and therby much disabled his body, for all which yet he never sued for any satisfaction. Your petitioner would likewise insist on the many services of another brother of his, one Major Francis Sydenham, slayne in the West, whose executors never received more than eighty pounds satisfaction of his arrears; but your petitioner shall cease to trouble your Highness.

"And your petitioner shall pray etc.

"THOMAS SYDENHAM.

"Friday March 3rd, 1653."

The first point which strikes us as noteworthy in this document is the endorsement, by which the writer is officially recognised as "Captain Sydenham" and in further documents connected with the affair is called Captain Thomas Sydenham, so that he is clearly identified. Now it seems unlikely or even out of the question that he would be called by this military title in virtue of his service (in the first Civil War) as a young man in Dorset nearly ten years before, even if he had a commission then—which is doubtful. It clearly points to some more recent military rank, and shows that he must also have taken part in the second war—namely, that against Charles II.

On consulting the Calendar of State Papers for the years 1650–1, we find several references to Captain Sydenham, all of which are referred in the index

to Thomas Sydenham. But a closer examination shows that there are clearly two Captain Sydenhams referred to. One was a captain of foot, the other in a cavalry regiment. The infantry officer served in the regiment of Colonel Stubber, which, on May 21, 1650, was ordered by the Council of State to march from Kent to Chester for transportation to Ireland. A few days later the Council addressed a severe reprimand to Colonel Stubber about the behaviour of his men. The Council had heard complaints of the misconduct of his soldiers while in Kent, and also in many places where they passed; more especially at the house of Sir James Harrington, near Uxbridge, two sergeants of Captain Sydenham's company had behaved in a very outrageous manner. This captain was evidently Sydenham's next brother John, who as we know from the petition did actually serve in Ireland; and this will be the best opportunity to tell what more is known about this brother, who evidently possessed the fighting qualities of his family. He was too young to have served in the first war, and when he entered the army we do not know. He must have gone with Stubber's regiment to Ireland and returned; and at the beginning of 1651 was promoted to be major, being then barely twenty-five years old. As a field officer he would have required an equipment of horses and so forth, for which his brother Thomas, comparatively wealthy as a Fellow of All Souls', advanced him money. He

went to Scotland with Cromwell's army which took the field against the younger Charles. In May it is recorded in Whitelock's journal that Major Sydenham was wounded in some one of the engagements near Stirling, and on May 25th letters from Scotland stated that he had died of his wounds. His fate was singularly like that of his brother Francis, both displaying the courage, and perhaps also the impetuosity, of the Sydenham character.

The captain of horse mentioned in the State Papers was quite another person, employed at the same time in quite another part of the country, and there can be no doubt that it was Thomas Sydenham.

How it happened that he was called from his Oxford retreat to active service in the field must now be explained.

After the conclusion of the first Civil War (which to contemporaries seemed much more sharply cut off from subsequent campaigns than it appears to us), there was no more fighting in England. But the second Civil War began with the landing of Charles II. in Scotland in June, 1650. Cromwell was sent with an army to oppose the Scots who had embraced the Royal cause. After his well-known victories at Dunbar and elsewhere he was in the early part of 1651 in the Highlands opposing the Scottish army under the King in person.

During Cromwell's absence in Scotland there were great fears of a rising in England against the

Parliament, and the greater part of the Parliamentary forces being in Scotland and Ireland it was resolved to call out a militia in various counties. Of these forces there were to be 3,000 horse, and possibly there was some difficulty in finding experienced officers to command so large a body.

However this may have been, at all events a commission in the first regiment of militia cavalry was given to Captain Sydenham. The original list of commissions (dated April 21, 1651) is in the Record Office, and has been carefully examined; but it is tantalising to find that no Christian name or initial is attached to the title. However, it could be no other than Thomas Sydenham, since the only other brother, Richard, was engaged in important civil business in London as "Commissioner of Fee Farm Rents," and records of his activity in this position are still extant in the State Papers.

We conclude, then, that Sydenham left Oxford and obeyed the call of duty by again taking the field as a cavalry officer. His command must have been regarded as of some importance, since we find two urgent notices from the Council of State respecting his troop: one is to be the Army Committee, representing that Captain Sydenham's troop, now appointed to march upon service, must have pay. Another is to the Militia Commissioners of Essex, ordering them to complete his numbers by sending certain men to Captain Sydenham "that he being complete may

attend the service of the Commonwealth to which he is commanded, and which cannot bear delay."

It is to this period that we must assign a remarkable anecdote of Sydenham, since it was the only time when he would have been in London with a captain's rank. It is related by a Dr. Andrew Broun, a Scottish admirer of Sydenham's to whom he confided in after years certain particulars of his military career, and who had this from his own mouth.

"At the time of those Civil Wars, when he discharged the office of a captain, he being in his lodging at London, and going to bed at night with his clothes loosed, a mad drunk fellow, a soldier likewise in the same lodging, entering the room, with one hand griping him by the breast of his shirt, with the other discharged a loaded pistol in his bosom. Yet, oh strange! without any hurt to him, most wonderfully indeed by such a narrow shield as the edge of the soldier's hand was his breast defended. For the admirable providence of God placed and fixed the tottering hand that gripped the shirt into that place and posture, that the edge thereof, and all the bones of the *metacarpus* that make up the breadth of the hand, were situate in a right line betwixt the mouth of the pistol and his breast; and so the bullet discharged neither declined to the one side nor to the other, but keeping its way through all these bones, in crushing them lost its force, and fell at his feet. Oh! wonderful situation of the hand, and more wonderful course

of the bullet! by any industry or art never again imitable! and, moreover, within a few days the soldier being taken with a fever arising from so dangerous and complicate a wound, died. Surely Providence does not bring forth so stupendous miracles, but for some great and equivalent end."

Thus moralises the worthy Dr. Broun; and indeed this marvellous escape shows that Sydenham's military service had other dangers besides those of the field of battle, on which, as he told Dr. Broun, he had several very narrow escapes.

The regiment of horse thus embodied was ordered to join Colonel Rich's force. The Council's orders to Colonel Rich were, in order to securing the Midland posts, to march to Leicester or Nottingham, and lie thereabouts with his own troops, Captain Sydenham's and others; to disperse themselves to any emergency, and keep up a constant correspondence with Major-General Harrison in Scotland. Here the troops remained till July, when Cromwell, writing from Scotland, sent for them to "embody upon the borders" ready to serve in Scotland or England as occasion should offer. Sydenham himself refers (in "Anecdota Sydenhamiana") to his having been in Scotland, where he seems to have physicked his men as well as led them to fight.

We know what happened next; Charles, slipping away from Cromwell's projected attack near Stirling, made a sudden dash southwards into England. Crom-

well started in rapid pursuit by a parallel line of march. He then ordered Harrison's cavalry, with Rich's force lying on the border, to hang upon the King's flank, and impede his progress. If Sydenham was, as we suppose, with Colonel Rich, he must have taken part in the encounters in Lancashire between the Parliamentary cavalry and the King's army. The fighting in some places, especially at the bridge of Warrington, was very severe. It hindered, but did not stop the King's progress. Whether the cavalry force came up in time to be present at the final battle of Worcester on September 3rd we have not been able to discover. The commanders under whom Sydenham served do not seem to be mentioned. At all events, after Worcester there was no more serious fighting, and Sydenham's second period of military service must have come to an end, having lasted about six months. It may have been in this campaign that he was, as he said once happened, "left on the field among the dead," but no positive record remains. We see that for at least two years afterwards he was still designated Captain Sydenham.

We are now able to understand Sydenham's position when he presented this petition. His never failing sense of duty had led him to give up a position of ease and comfort for dangerous military service, which had seriously impaired his health. It is known, indeed, from his own statement in after years, that he had already suffered from gout. He was impoverished in

fortune by his generous help to his brother; and had consumed nearly two years in vain attempts to obtain what seems very reasonable compensation. Now, however, the influence of his brother, Colonel Sydenham, with the Protector, gave him a better chance of success. Colonel Sydenham had been a devoted adherent of Cromwell. He had been largely concerned in the proceedings by which Oliver became Protector, and was one of his first Counsellors of State. He was now a wealthy man, receiving from his appointments alone, according to a contemporary statement, at least a thousand a year, a very large sum in those days. He does not seem to have assisted his brother in pecuniary matters, but his political influence would doubtless be available, and probably it was partly owing to this that the Protector returned a favourable answer to the petition.

The result was the following document appended to the petition in the Record Office.

"Friday, March 3, 1653–4.

"*His Highness being very sensible of the matters represented in this petition, is pleased in an especial manner to recommend it to the Council that they may give the petitioner due satisfaction and that with all convenient expedition.*

"(Signed) J. SADLER."

Accordingly, on April 23rd, six hundred pounds

was ordered to be paid to Sydenham out of certain moneys belonging to the Commonwealth in the hands of the Commissioners for coal duties in the port of Newcastle-on-Tyne.

In the minute of the Council of State ordering this payment we also find the entry that the Revenue Committee was directed to give Sydenham "such employment as he is most capable of." But it was not till five years later that he received any public appointment.

It would appear from this fact that Sydenham had not even at this time definitely resolved to enter the medical profession, and he probably still had an eye on a political career; but an event which happened in the next year, and which we may imagine was already much in his thoughts, seems to have finally decided him to engage in professional life.

The archives of All Souls' College show that Sydenham resigned his fellowship in the year 1665 (though the precise date is not given), and in the same year the Parish Register of Wynford Eagle records that Thomas Sydenham was married to Mary Gee; here again without giving the date. But these two events were of course closely connected, his marriage necessarily depriving him of his fellowship.

One would naturally be anxious to know something about the lady Sydenham chose for his wife; but there is no positive record of her parentage or family. There is, however, a little conjectural evidence, which,

in the absence of positive knowledge, may be worth recording.

As the marriage took place at Wynford Eagle, we should suppose that the lady was of a Dorsetshire family. The only person bearing this name who is mentioned in the county History is a certain Sir Orlando Gee, who bought an estate in Dorsetshire, though he afterwards lived at Isleworth in Middlesex, and died there in 1705. For various reasons he could not have been the father of Sydenham's bride, but she may have been connected with his family. Some other members of the Gee family are traceable, but we have not been able to find anything connecting them with Sydenham's wife.

Whoever his wife's mother may have been, Sydenham certainly had a great regard for her. He provided for her in his will, for she survived him ; and it seems probable that she had lived in his house.

The sum which Sydenham received as compensation, equivalent, according to the ordinary calculation, to nearly two thousand pounds at the present day, constituted a small capital. Doubtless this enabled him to marry, and also facilitated his entering into the medical profession.

We know nothing positive about the time at which Sydenham began to practise, but two allusions in his published works give a clue to the date. In the dedication to Dr. Goodall, in September, 1686, of his work entitled "Schedula Monitoria," he says he had

been engaged in investigating disease for the space of thirty years. And in his treatise on Dropsy, published in May, 1683, he says that the first case of Dropsy he ever treated was that of a Mrs. Saltmarsh, whom he attended in Westminster twenty-seven years before, or thereabouts. Both these allusions point to the same date, about 1656; and we may therefore conclude that it was in the year after his marriage, or possibly in the same year, that he took a house in Westminster, and started in practice as a physician.

V

Life in London and Montpellier

WE know nothing directly of Sydenham's life in London. He certainly settled down in Westminster, and it has been shown that he first lived in King Street, the little street running parallel to Parliament Street, which only last year, 1899, was demolished to make room for new Government offices. It did not, however, of late years, contain any house which Sydenham could have lived in, having been much modernised. It is stated by Mackenzie Walcot, in his "Memorials of Westminster," that he lived in a house upon the site of the Ram's Mews. But even the "Ram" had disappeared in the latter days of King Street.

The reasons for Sydenham's choosing this part are evident enough. It was in the immediate neighbourhood of the Protector's Court at Whitehall, and the official residences of his statesmen and generals. Politicians, members of Parliament, while Parliaments

there were, and army officers were all around; and it was of course among this party that Sydenham's connection lay. His brother, Colonel Sydenham, must have been living near; and somewhat later had lodgings in Whitehall itself. His brother Richard then or later was a little further off, at Worcester House in the Strand. And within a few minutes' walk, in Petty France, lived Mr. John Milton, Latin Secretary to the Council of State. One would like to think of the young Puritan physician being called in to tend the blind poet's growing infirmities, but of such a connection there is no trace. It is not indeed possible to recover the names of any of Sydenham's patients in these days, except the worthy Mrs. Saltmarsh, formerly referred to, on whose dropsy he tried his 'prentice hand. This one case is, however, just enough to show that he practised among the citizens, and not solely, if at all in the official circles.

Even the physical conditions of the neighbourhood had some bearing upon Sydenham's practice. He wrote very largely upon fevers and agues, and as has been remarked by Dr. Nias, the whole neighbourhood of Westminster was swampy and malarious, so that such diseases must have been rife there. The old Westminster was, as is well known, built upon a little creek, long since covered up. Behind King Street lay stagnant marshes, stretching out towards Pimlico, now collected into the ornamental waters of St. James's

Park, which must have abounded in gnats or mosquitoes, known in these days to be necessary to the endemic prevalence of malarious diseases. Many well-known persons suffered from these complaints; indeed, Cromwell died of a malignant ague, the recurrence of an old enemy of his, which, though attributed to a chill caught at Hampton Court, might as well have been acquired in the neighbourhood of Whitehall. So we see that external circumstances, even if they do not mould the characters of men, largely determine the form which their activity takes.

It is not likely that Sydenham was at first very successful in practice, for there are two facts, to be presently mentioned, which show that he sat somewhat loosely to his profession, and was even prepared to throw it up for political or official life. Also it may be divined that he found his scanty stock of professional knowledge hardly sufficient for practising medicine with the thoroughness which his conscientious nature must have felt to be necessary. It was not in him to carry off imperfect knowledge by plausible manner or dogmatic assumption.

The unsettled state of his plans, perhaps, also affected by pecuniary needs, is shown by his becoming a candidate for Parliament as burgess for Weymouth in the first Parliament of the Protector, Richard Cromwell, which was summoned at the end of 1658, the writs being actually issued on January 3rd of the next year. Sydenham had then been probably less than three

years in practice. The immediate motive most likely was that his brother, Colonel Sydenham, was beating up recruits to assist the new Protector, whom he then, though not afterwards, supported. Sydenham was not elected, and had he been so, it would have been of little use to him, as the Parliament only lasted three months.

However, he seems to have established some claim on the gratitude of his party, for he at length received the political patronage for which he was, as we have seen, recommended by the Council of State to the Committee of Revenue in 1654; being appointed on July 14, 1659, to the office of "Comptroller of the Pipe."

The now obsolete Pipe Office was a department of the Court of Exchequer chiefly concerned with Crown Lands and other financial matters. It was abolished in the reign of William IV. The duty of the Comptroller was, we are informed, to register leases granted by the Crown. Thus Patronage, with its customary blindness, having by mere good luck made Sydenham a physician, was now about committing a disastrous blunder in making him an official. It is melancholy even to imagine that the great Sydenham might have passed his life sitting in an office to register leases. But Providence, wiser than Patronage, determined otherwise; for from the course of political events Sydenham could not possibly have held his place after the Restoration, which happened in the next year.

Indeed, there is no evidence that he ever performed the duties of the office, which may possibly have been a sort of sinecure, or capable of being discharged by a deputy. However, there is reason to believe that his official life, if it was ever really begun, was interrupted by an important event in his career which may with much probability be referred to this time, namely, his going to study at Montpellier.

SYDENHAM AT MONTPELLIER.

There is good evidence that Sydenham studied at Montpellier, though there is considerable doubt about the time at which he did so. The fact rests on the statement of a M. Desault, a French surgeon of the eighteenth century, who says positively that a friend of his, a doctor named Emeric, who studied at Montpellier, knew Sydenham intimately there, and for a long time carried on a correspondence with him by letters. M. Emeric was not a man of sufficient importance to be mentioned in medical biographies, and we canot tell to what date this acquaintance is to be referred. Our only guide, then, in this matter is what we know of Sydenham's own history.

From what we know of Sydenham's occupations, it is very unlikely that he left England for any considerable time, or indeed at all, before he entered on practice. The suggestion that he visited Montpellier "during a long vacation" can hardly be entertained. The question of vacation or term time would have

made little difference to him as a fellow of a college; but absence from All Souls' would have meant losing the chief part of his income, since at that time the profit of a fellowship to a non-resident was very small. We have also no reason for thinking that he had any income independent of his fellowship. Between 1655 and 1659, on the other hand, it is not impossible that he may have saved some money, or the office conferred upon him in 1659 may have been immediately profit-table, or may have enabled him to raise some capital on its security.

There is also another source from which some light may be thrown on a possible Continental journey. During the Commonwealth and Protectorate (as indeed nominally under the Monarchy and even now in many countries), no one was allowed to travel on the Continent without a direct permit from the Council of State. For this there were political reasons, especially that any one proceeding to the Continent might be suspected of keeping up communications with the banished King. No doubt this rule was often evaded. John Evelyn in his diary says that he counterfeited a pass with success, "it being so difficult to procure one of the rebels without entering into oaths." But a man of Sydenham's position and connections would have incurred grave suspicion if he had gone abroad without a pass. Now the minutes of the Council of State, as published in the Calendar of State Papers, contain the names of many persons to whom permits were

granted, and the name of Sydenham occurs several times, though in most cases with a Christian name showing it was not our physician. However, on the 28th July we find permission given to Mr. Sydenham and Mr. Briggs to travel beyond seas. We conjecture that this meant Dr. Sydenham, though no Christian name is given in the original entry. A further conjecture may be hazarded as to who was his travelling companion. Among the professors at Gresham College, with some of whom, at all events, Sydenham was intimate, was a certain Robert Briggs, Professor of Law, son of Augustine Briggs of Norwich, a wealthy member of Parliament. Now we learn that Briggs had another son, who died abroad. Conjecture again suggests that this son may have been a consumptive young man, proceeding to the South of France for his health, and that Sydenham accompanied him as his physician, the wealth of the Briggs family making this a not unremunerative task. All this, we must repeat, is conjectural, and the fact that Sydenham had just been appointed to a lucrative office may be considered as making it probable or improbable according to circumstances which we do not know. There is, however, some slight corroborative evidence, founded on the state of medical education at Montpellier.

Among the French writers there is a strong tradition that Sydenham was at Montpellier the pupil of a celebrated physician named Charles Barbeyrac. The details referring to this supposed connection may

be found in the admirable life of Sydenham by Dr. Frédéric Picard, to which, and to Moreri's "Grand Dictionnaire" we are indebted for most of what follows.

Barbeyrac, a native of Provence, took the degree of Doctor of Medicine at Montpellier in 1649, and settled in practice there, with great success. He was a Protestant, and as such incapable of holding an academical chair. Nevertheless, in 1658, he became a candidate for a professorship, with the object, it is hinted, of making himself known, though without any hope of obtaining the chair. The disputations which he held in support of his candidature procured him so high a reputation that though inevitably unsuccessful, he soon became the most popular physician in Montpellier. His reputation spread through the whole of France, and even to foreign countries. He was consulted in all difficult cases, and became the physician of many eminent persons, even of prelates, in spite of his theological opinions.

Being precluded from teaching in the University, he made use of his private practice for the instruction of students, following in this the example of Galen and other ancient physicians. Students crowded in large numbers to profit by his oral teaching. Some ten or twelve of them used to accompany him in his visits to his patients. "On the way he would give them a sort of clinical lecture on the cases and their treatment, answering the numerous questions of his

pupils with excellent judgment and fluency. His ideas about many diseases were entirely novel, but lucid and well founded. His practice was admirable, being at once simple and easy. He had discarded a large number of the useless remedies employed before his time, which served only to embarrass the sick man : making use of a few only ; but those well chosen and efficacious. These he employed so well that no physician ever had more successful and striking results from his treatment." It is also said that the ablest European physicians who studied at Montpellier in Barbeyrac's time were his pupils. Now much of this account is so like a portrait of Sydenham himself that it is easy to suppose it a portrait of his master.

It is also notable that Sydenham's friend, Locke, studying at Montpellier some years after and knowing Barbeyrac well, used to say, according to Moreri, that he never knew two men more alike in opinions and character than these two physicians. The mere fact that Locke should have compared them is significant. It may also be observed that both were gentlemen by birth, and professed a form of religion unpopular in their respective countries, but closely allied ; for French Protestantism and English Puritanism were much alike. This may have been a bond of sympathy between them, and in both may have contributed to foster independence of thought and originality.

It must be admitted, therefore, that the tradition of

the connection of Barbeyrac and Sydenham is an extremely probable one, even if not definitely established; and that the unacademical French teacher may have had a large share in forming the professional character of his more illustrious pupil. Furthermore, we may remember that Sydenham did not go to Montpellier to take a degree, and was under no obligation to attend University lectures, so that he very likely had little to do with the University, and found the instructions of an independent clinical teacher more to his taste. These circumstances may throw some light on the entire absence of anything like an academical cast in his writings.

It would be interesting to know whether Barbeyrac taught any doctrines resembling those afterwards known as Sydenham's. A later French writer (M. Bouteille, said (in 1776) that Sydenham had learnt his cooling method (in fevers) of Barbeyrac, which seems somewhat hasty, since, according to M. Picard, the French teacher left no genuine works, those professing to give an account of his doctrines being without authority. Barbeyrac was a great personality, though hardly a prominent figure in the history of Medicine; but if he was the teacher of Sydenham, he has an additional title to fame. We have consulted a little work called "Dissertations sur les Maladies," by M. Barbeyrac. It could hardly have been written by him; but may perhaps be based on some unauthorised reports of his teaching. It professes to teach new

ideas about diseases in opposition to the opinion of the ancients, and to some extent justifies this pretension. Looking at the article on Small Pox we do find the words "cooling remedies" (*choses rafraichissantes*); but in no other respect does the book remind one of Sydenham. It is also important to remember that Montpellier was regarded as the chief seat of Hippocratism, while Galenism reigned in the schools of Paris.

In regard to the chronological question raised above, it is clear that Barbeyrac did not become a popular teacher till 1658, so that Sydenham, if he was his pupil, could not have visited Montpellier before that year, and he could not have been there later than 1660, when he must have been in London, since he speaks of being laid up for two months with a severe attack of gout in the summer of that year; and his observations on the diseases of London begin in 1661. Hence the date 1659, suggested by the permission of the Council of State, fits in very well.

It may be asked why Sydenham selected Montpellier to improve his medical knowledge rather than the nearer schools of Paris or Leyden? It may have been, as has been suggested, because professional duties called him to the South of France. It may have been on account of the reputation of the school, though at this time it does not seem to have been much visited by English physicians. A little later Sydenham's friend, Locke, and a younger physician,

William Briggs, of the family above mentioned, who must have known Sydenham, studied there. But it is a curious fact that the excellence of Montpellier had some thirty years before been loudly praised in a little book published at Oxford in 1631 by Dr. James Primrose, a man of Scottish parentage, but born and educated in France, and a graduate of Montpellier. This little work was addressed to Dr. Thomas Clayton, Regius Professor of Medicine at Oxford, and maintained that Montpellier occupied the first place among all schools of Medicine. Such a book, one of the few productions issuing at that time from the Oxford press, Sydenham could not have failed to come across in some Oxford library; and thus his curiosity to visit Montpellier may have been of long standing.

It is impossible to say how long Sydenham remained in the South of France, but as such a journey was in those days a serious matter, it is very probable that he would have remained over the winter; since, however, he was in London in the following summer, his stay must have been less than a year, and may have been only six months. It is thus possible that he remained abroad long enough to be absent during the critical period of the Restoration of Charles II. in May, 1660. This event, however, brought no evil consequences to Sydenham, except the loss of his official position, for he enjoyed the benefit of the Act of Indemnity, which applied to all who had taken part in the rebellion, with certain exceptions.

His brother, Colonel Sydenham, was not so fortunate. He was one of the twenty persons, beside the regicides, named by the House of Commons to be exempted from the benefits of the Act of Indemnity, *in all particulars not extending to life*, but his inclusion in the list was only carried by a small majority. In the end he was declared perpetually incapacitated from holding any office or public employment. William Sydenham retired to Clapham in Surrey, then a country village. Later in the year he was informed against for using seditious language, and compelled to give a bond of £1,000 to refrain from disturbing the quiet of the kingdom.

This may be the best place to give what more is to be said of Colonel Sydenham. He returned to Wynford Eagle, died, and was buried there on the 1st of August, 1661, being, as we imagine, crushed by the downfall of his party and cause. He left a son, William, who succeeded to the estate, but died without issue in 1718. His daughter, Mary, married Walter Thornhill, and became the mother of Sir James Thornhill the painter. Colonel Sydenham's will was made in haste, only a few days before his death, his brother Thomas being both a witness and an executor. The amount of the estate is not named, but it is stated from other sources that Colonel Sydenham left a plentiful estate in money, jewels, &c.

The year 1661 was a fatal one to the Sydenham family. Colonel Sydenham's widow survived her

husband barely a week. The old father died in November of the same year; and as Richard Sydenham had died in January, 1657, Thomas was now the only survivor of that remarkable family of brothers.

We do not know exactly how soon Sydenham recommenced practice after his return from France, nor where he lived; but he must have been practising in London in 1661, since his observations, afterwards published, on weather and diseases in London began with this year.

The next important event in Sydenham's life was his obtaining a license to practise from the Royal College of Physicians. He passed the three obligatory examinations on April 24th, May 8th, and June 5th, being admitted a Licentiate on June 25, 1663.[1] In the admission book he is recognised as being Master of Arts and Bachelor of Medicine of Oxford. It may seem strange that Sydenham had not obtained this license before, but had been practising without legal permission. Strictly speaking, no doubt he should have taken this step some years earlier, since

[1] Sydenham seems to have had some difficulty in bringing evidence of his degrees. Probably he was asked at the first examination for diplomas which he did not possess. He seems to have taken counsel with Robert Boyle, who wrote to his friend Dr. Richard Lower in Oxford. Lower obtained from "The Register" a certificate of Sydenham's M.B. degree, but no record of the M.A. could be discovered. Sydenham would not have claimed an M.A. degree unless he had actually taken it; but this story confirms what was said above about the record of it being lost. The above story occurs in a letter from Lower to Boyle, dated April 27 1663; and though Sydenham's name is not mentioned, it must have referred to him.

the College of Physicians had the exclusive privilege of licensing all physicians in London and some miles round, so that no one could legally practise without its license. But during the troubled times of the Civil Wars and the Commonwealth these regulations had not been strictly enforced, and a good many physicians were, like Sydenham, practising without a legal status. About this time, the President of the College of Physicians, Sir Edward Alston, took vigorous steps to bring all physicians in London within the collegiate fold. This object was partly effected by admitting many physicians of good standing, who possessed the requisite University degree, but from their age and position were unwilling to undergo the regular examination, as *Honorary Fellows* with full privileges. In the year 1664 no less than seventy were thus admitted, and by their fees greatly augmented the finances of the College, which had suffered seriously during the times of trouble. This privilege could not have been offered to Sydenham, as he was only a Bachelor of Medicine, but he had probably received a hint that he ought to apply for the authorisation of the College.

Sydenham never attained the higher rank of Fellow, and since this fact has been interpreted as showing some special animosity against him on the part of the College, it is right that the question should be examined. In the first place, no one could be admitted to the Fellowship unless he were a doctor of

medicine. Now Sydenham did not take his doctor's degree till 1676, and then took it, not at his own University, but at Cambridge. Why he allowed twenty-eight years to pass before he applied for the higher degree, and why he did not take it at Oxford, can never be precisely known. But it is easy to see that if he had applied for a degree at Oxford in the years immediately following the Restoration he would have been in all probability not favourably received. Indeed, a man of his antecedents and family connections might very likely, in those times of reaction, have met with a *non placet* in Convocation. We know that Locke was refused a medical degree at Oxford when he tried to obtain one by special creation, even though he was supported by a very strong recommendation, almost equivalent to a command, from Lord Clarendon, the Chancellor of the University; and a second attempt was equally unsuccessful. While this was the temper of the University, Sydenham would have had little chance.

From all we know of Sydenham we should conclude that he cared little about academical distinctions, and doubtless he bore the privation with equanimity, and in later years, when the same difficulties might not have stood in the way, he had ceased to care what letters he could write after his name. The more surprising fact is that he did after all think it worth while to take a doctor's degree so late in life; but of his motives in so doing we have no knowledge.

The fact, however, is undoubted that up to the year 1676 Sydenham was not eligible for the Fellowship; and the question could only be why, in the thirteen remaining years of his life, he did not attain this honour. Certainly he never applied for admission, as there is no record of any such application in the archives of the College, and we can well believe that he would have been disinclined to present himself for an examination. Probably there was a party in the College opposed to him, and it is quite certain that Sydenham thought there was. For this we have the testimony of Dr. Andrew Broun. This worthy and candid Scot relates that while in Edinburgh in the year 1687 he came across Sydenham's "Schedula Monitoria," and was so much impressed with his new method of curing fevers that he determined to seek further knowledge of it at the fountain head. Hastening therefore to London, he sought out Sydenham, and found in the man and his practice "everything that use to beget in wary and prudent people trust and knowledge." After some months spent in his society, he returned home as much overjoyed as if he had gotten a treasure.

Sydenham seems to have been very confidential with Broun, and among other things complained to him that by all his labours to advance medicine "he had only gained the sad and unjust recompence of calumny and ignominy, and that from the emulation of some of his collegiate brethren, and others, whose indig-

nation at length did culminate to that height, that they endeavoured to banish him, as guilty of medicinal heresies, out of that illustrious Society."

If a certain clique ever had any such design, it is clear that it never came to any overt act. On the other hand, Sydenham enjoyed the friendship and admiration of several of the most eminent Fellows; while the College in its official capacity, whenever there was occasion to mention Sydenham, spoke of him with the highest respect. When the College had to give its *imprimatur* to the second edition of the "Schedula Monitoria," the license to print was granted with the unusual and cordial expression, "Lubentissime."

The presentation copies of some of Sydenham's works, still preserved in the library of the College, also bear curious testimony to the high estimation in which he was held. When he gave the "Epistolæ Responsoriæ," the inscription is "Ex dono Cl. [clari or clarissimi] authoris. Mar. 30. 1680." The same words are used in the "Dissertatio Epistolaris," given in 1682; but the scale of admiration rises, for in the treatise on gout, given in 1683, the inscription is "*Donatus ab autore præstantissimo.*"

All this shows that Sydenham had warm friends as well as some enemies in the College. It is possible that the opposition of the latter deterred him from applying for the Fellowship; but, on the other hand, considering that candidature would have implied a

formal examination, particularly distasteful to a man of his age and distinction, it is perhaps more likely that this barrier, together with a constitutional indifference to honours and titles, may have induced him to content himself with the title of Licentiate.

VI

Sydenham and the Plague

IT was a few years after Sydenham's return from Montpellier, when he was still engaged in studying the epidemics of London, and preparing to write upon them, that the most formidable of all known epidemics visited the city. It was that terrible visitation known in history as the Great Plague of London, the last appearance of this dread malady in our country, and even to this day a name of fear.

To explain the peculiar significance of this epidemic, a few words must be said about the previous appearances of the disease in our country. It had appeared from time to time since the greatest of all recorded pestilences, the world-wide (if we leave out the New World) epidemic of the fourteenth century, known in after times as the Black Death, which visited the shores of England in 1349. It may have existed in Europe and in England during the Middle Ages, but on that point we have no accurate knowledge.

What is certain however, is, that after the fourteenth century, though not constantly present, it renewed itself in destructive epidemics during the fifteenth, sixteenth, and seventeenth centuries. Some thought that it was always introduced from abroad; some that it sprung up afresh in our own soil from local conditions, a disputed question which need not be considered here. It will be sufficient to say that there were several serious outbreaks in Tudor times, more especially near the beginning and near the end of Elizabeth's reign, but a much more alarming epidemic occurred in the first year of King James I., in 1603. This was a "great plague" causing over 33,000 deaths, and probably in proportion to the population of London, hardly less destructive than that of Sydenham's time. In the year of the accession of Charles I., viz., in 1625 another epidemic occurred still more fatal, causing 41,000 deaths; but whether this number was higher or lower in proportion to the population of the city, would be difficult to say. Between these visitations and up to 1647, the plague was never absent from London, causing in some years a large mortality. In 1647, 3,500 are said to have died of it; but in the next year the mortality fell to a few hundreds, and in succeeding years almost to nothing. During the civil wars, and under the Commonwealth and Protectorate, the disease was virtually absent from London, so few deaths being ascribed to the disease that the figures may have no significance whatever. In other parts of

the country a few small epidemics were recorded, one of these being noticed, though not from personal knowledge by Sydenham himself; but they were insignificant.

The exemption of London and England from its old and dreaded enemy for sixteen years, till it returned in 1664 is a very remarkable fact. Explanations might be hazarded, which it would be beyond our purpose to discuss. We need only consider how it appeared to the popular imagination. We are told it was a popular saying that the plague came in with a new king, referring, of course, to its appearance in the early years of James I. and Charles I. And as it almost vanished after the memorable year 1648, when the monarchy was overthrown by the execution of Charles I., it is not surprising that superstitious minds traced a connection between these pestilences and political events. The Puritans were not alone in recognising the hand of divine Providence in sending pestilence as a judgment for the sins of mankind, but they were especially prone to interpret these events in the light of Old Testament history, as a judgment on the people for the sins of their kings. Hence we find even John Milton when he wrote in 1660 his last despairing plea for "A free Commonwealth" in opposition to Monarchy, remarking on the plagues and pestilences that in the time of Monarchy wasted the City of London, such as through God's mercy, had not been known since. Probably when the

pestilence recurred, only about four years after the Restoration, the Puritans may have thought their reading of History confirmed.

Apart from political or religious prejudices these facts will help us to understand the feelings of the citizens of London about the Great Plague. It was nothing unprecedented or exceptional, as the popular histories of the event have led many to suppose. It was not a new and foreign disease like the Asiatic cholera of later times, but a familiar domestic foe. Old men might remember something even of the great plague of James the First's reign ; many would have lived through that of 1625 with its repeated recurrences, and even the younger generation would have heard their fathers tell of those terrible calamities. So in 1664 when news came of a destructive pestilence in Holland ; there was some feeling of alarm. Scholars would have muttered something about *paries proximus ardet;* the government proposed stringent rules of quarantine and exclusion, which the citizens and commercial classes, in the interests of trade, steadily opposed, so that nothing decisive was done. In the meantime indications of the coming storm became more numerous. In the autumn of 1664 a serious outbreak of plague occurred on the eastern coast at Yarmouth, a seaport having frequent intercourse with Northern Europe, and in London itself were premonitory symptoms, little heeded at the time, but as since brought to light, of great significance. During the

autumn and up to Christmas, 1664, there were many cases of a mild form of plague, such as in places where the disease has been carefully observed, have been found to be the forerunner of a severe epidemic. But the matter, says one of the sufferers who survived, was kept quiet, and as the deaths were few little evidence was furnished by the bills of mortality. Boghurst, an apothecary, who has left the best account of the great epidemic, affirms that plague had occurred for three or four years before in the parishes of St. Giles's, St. Clement Danes, St. Paul's, Covent Garden, and St. Martin's in the Fields; that is, in all the western suburbs, parts of which were vaguely spoken of as Westminster.

However, the cold of winter, as generally happens in Northern climates, checked the spread of the epidemic, and it remained dormant till the spring. In May the spread of the disease already caused alarm, though the number of deaths was not great. In June it steadily increased, and in July the epidemic burst out with explosive violence, and increased up till the fatal month of September, when the deaths were at the rate of something like 7,000 a week, after which it declined till the end of the year. What was notable, though paralleled in most epidemics of plague, was that towards the close a much larger proportion of those affected recovered. This fact is of some importance in considering Sydenham's relations to the plague.

As the reader may like to have some notion of the actual mortality of this historical epidemic, we may say that the number of deaths recorded in the bills of mortality is 68,596, but there can be no doubt that this number is too low. The enumeration was made from the reports furnished by certain ignorant old women called searchers to the parish clerks. For obvious reasons the searchers would often be tempted to give the disease another name; moreover, large suburbs were not included in these Bills, and no account would be taken of those who left the city and died elsewhere. So that, taking the population of London then as about 400,000, it is probable that about one-fifth may have died of the plague, while a large though uncertain number sought safety in flight.

This great mortality was confined to the year 1665, for though the disease recurred in the next spring, and caused a considerable number of deaths, they were not so numerous as to amount to a great epidemic. In succeeding years it steadily declined to a vanishing point; and, as we know, has never recurred in this country. The possible causes of its extraordinary violence in 1665 and of its final extinction are questions too large to be entered on here.

We return, then, to the spring of 1665, and find that in the month of May there was already considerable alarm on the subject of plague. This would have been greater in the West End, where Sydenham lived, than in other parts of London, since the group of

parishes mentioned, especially St. Martin's and St. Giles's, were at first the chief focus of the disease. From these parts it travelled slowly eastward to the City, so that it did not reach the eastern parishes, as Boghurst tells us, till it had been six months in the western parts. Pepys, who lived in the City, says that on his journeys to Westminster he found the plague prevailing there, while he still hoped it had not affected the City, or at least only in a few houses, but he thought going home from Westminster to the City a very dangerous passage. Thus, when June came, there was great commotion in the West, and Pepys again records how on the 21st of June he found "all the town almost going out of town." During the month of June nearly all the rich people and those who could afford to leave their business left the West End. The King and Queen went to Hampton Court; afterwards to Salisbury and then to Oxford.

So it happened that in the latter part of June Sydenham says the danger came to his own doors, and he was persuaded by his friends to add himself to the increasing number of fugitives. He and his family retired a few miles from London, afterwards, it would seem, to some more distant spot, possibly to Dorset.

This is the one event in Sydenham's life which his biographers have always regretted. To a student of epidemics no more notable object of study could have

been presented than the pestilence which was invading London. To a physician it might seem that the duty was indicated of remaining to help sufferers who stood in so great need of medical help. Had he remained he might have added a memorable chapter to the history of the plague, and done good service in his profession.

On the other hand there are certain circumstances apart from the mere fact that he had a wife and young children, which put his conduct in a somewhat different light. To begin with, most of his patients must have left, or been on the point of leaving town. The regular or college physicians then practised chiefly among the rich, except so far as they were connected with hospitals. Their regular fee was a high one for the times, viz., an *angel*, equal to ten shillings, worth three or four times as much in modern money. The name of this coin gave rise to numerous jests at the expense of physicians. Boghurst, the worthy apothecary, who stuck to his post during the epidemic, says it was only the rich who were permitted to die "surrounded by angels." Culpepper, the herbalist and quack, has a bitter gibe that "Physicians of the present day are like Balaam's ass, they will not speak until they see an *Angel*." All this meant that physicians attended chiefly wealthy patients.

When it is said with some reproach that so many London physicians left the city during the plague, this statement must be qualified by remembering the

peculiar class distinctions of the profession in those days, which exist indeed still to a large extent in England, though they are not so clearly marked in other countries. The medical attendants of the poor were the surgeons and apothecaries; and most of these seem to have remained; and the latter at all events made a large harvest by selling medicines for prevention as well as for cure of the disease.

Beside this, it was true of the plague of London, as it has been of most similar pestilences elsewhere, that it affected the lower classes much more than the wealthy, even in proportion to their numbers, so that it was known as "the poor's plague"; and thus the regular patients of the physicians, even if they remained in town, were little affected. After the epidemic was over it was noticed how very few persons of wealth or distinction had died.

However, a good many physicians did remain, such as Hodges, who wrote a book on the plague; Wharton, physician to St. Thomas's Hospital, who remained at his post to take charge of the sick soldiers at the special request of the King, and who was promised a reward which he never received, and others. But all whose names we have been able to find lived in the City. Had the West End physicians remained, they would have found themselves almost in solitude, among empty houses.

These facts show what justification there was for Sydenham's leaving London. We cannot but wish

they had not appeared so strong, for if this great observer had remained to study the epidemic, medical literature might have been enriched by a masterly account of it, instead of the somewhat meagre and unsatisfactory account of the disease, which was all that our physician's scanty opportunities enabled him to furnish. Probably he saw very little of the disease. Before he went away the epidemic was not widely spread, and the only case which he describes, saying he did not know whether it was plague or not, may be now, with our present knowledge, said pretty certainly not to have been so.

On his return he found the disease still lingering, and he says, modestly, that, in the absence of older physicians, he had a good deal of practice. But the disease, if he saw true cases of it, had then, as is usual in epidemics, assumed a milder type, and thus Sydenham was led to take an over-sanguine view of the efficacy of treatment.

His own method of treatment, founded partly on his own experience, partly on accounts which he had heard of successful practice in isolated cases which occurred during the Civil Wars, was that of profuse bleeding, which he admits was generally held in horror.

This method, however, has been condemned by most of the best physicians who had large experience of the disease, though it had been recommended by some. Boghurst, the apothecary, whose excellent

account we have already referred to, condemns it unreservedly.

Sydenham's theory of the origin of plague was not very different from that of most of his contemporaries, ascribing it to atmospheric disturbances, and he attached little importance to contagion. With much candour, however, he admits that he had grave suspicions whether the mere atmospheric constitution, without some Fomes, or introduction from pestilential localities of an infected person, could in itself originate plague. He instances the effect of strict preventive measures in keeping out plague, as was done in Italy, when the precautions taken by the Grand Duke of Tuscany in 1650 kept out of that country a plague which had ravaged nearly the whole of Italy.

Medical opinion in that day was divided, as it has been to some extent ever since, between two opposite views on the subject—views which may be summarily defined as that of the Localists and that of Contagionists. The former referred the outbreak of plague in any particular place to local conditions; the latter to importation from some other infected locality. We see that Sydenham was in the main a Localist; but he admitted the possibility of some truth in the views of the Contagionists.

VII

Sydenham's Writings on Fevers

SYDENHAM'S absence from London during the time of the plague had one advantage, that it gave him some months of enforced leisure from practice, and he employed the time well. For it was then that he composed his first medical work, one of no small importance in the history of medicine. It treated of fevers, and was founded on observations which he had been collecting since 1661, when he began to study the fevers of London as they presented themselves to him in his own practice. This class of diseases was always a favourite study of Sydenham's, and, as already mentioned, had a local significance for him as being especially prevalent in the neighbourhood where he practised. They also had a much greater relative importance in his time than at the present day, since he estimated that they made up two-thirds of medicine. In our own day the same class of maladies, called in official returns zymotic

diseases, are credited with only one-tenth of the total mortality from all causes. Sydenham, it is true, included some acute diseases not now reckoned as fevers, such as Pneumonia, Erysipelas, and Rheumatism. But even supposing that he was led from special circumstances to make too high an estimate, the difference is enormous.

This little book was entitled, "Thomæ Sydenham Methodus Curandi Febres, propriis observationibus superstructa" ("Thomas Sydenham's method of treating fevers, based upon his own observations"). It is a small octavo of 156 pages containing about 17,000 words; that is, it would make about two longish articles in a medical journal. It was written, as were all Sydenham's published works, in Latin, which gave it the great advantage of being intelligible to doctors all over Europe. Medical works in English were then very few, and looked upon with suspicion as if meant to appeal to the public, not to the profession. Surgeons and quacks might write in English, but for an orthodox physician to do so would have been an act of bad taste, almost amounting to a crime. The question whether the Latin was Sydenham's own will be considered afterwards.

The dedication is noteworthy, as it is to the Hon. Robert Boyle, the eminent natural philosopher, and the representative man of scientific research at that time. Boyle, who was so acute and diligent an investigator in many departments of physical science,

took great interest in medicine, but was not on that account popular with the medical profession. He was regarded as something of an interloper. One contemporary physician names the "virtuosi" (alluding to such men as Boyle) and "English books" as among the crying evils which injured the interests of medicine. Hence Boyle's was not a name to conjure with, and might not have been the best to choose for the patronage of a medical work. But Sydenham had a definite and very good reason for his dedication. In the first place it was by Boyle's advice and prompting that Sydenham undertook to treat of this department of medicine, and he calls Boyle as a witness to the fidelity and usefulness of his observations, since the philosopher had, with great kindness, accompanied him on his visits to his patients; in which, says Sydenham, he showed a benevolence and condescension contrary to the spirit of the times. The treatise, moreover, would not be less welcome to Boyle because it was small in bulk and not swollen out with the spoils of other authors (whose ashes might rest in peace so far as Sydenham was concerned). There were other parts of medicine which he hoped to treat in the same manner, and thus redeem a promise made to Boyle; but for the present he thought it better to try the fate of this little work before rashly attempting more, especially in an age when subtle speculations were more valued than honest practice.

It is plain that Sydenham's respect and admiration for Boyle were paid to his independence of thought and habit of investigating nature at first hand for himself, not so much to the value of his special researches, which lay for the most part outside Sydenham's sphere of interest.

The preface to the reader displays so well the noble and lofty spirit in which Sydenham regarded his work as a physician, that the beginning of it is worth translating.

"Whoever applies himself to medicine ought seriously to weigh the following considerations. First, that he will one day have to render an account to the Supreme Judge of the lives of sick persons committed to his care. Next, whatever skill or knowledge he may, by the Divine favour, become possessed of, should be devoted above all things to the glory of God and the welfare of the human race. Moreover, let him remember that it is not any base or despicable creature of which he has undertaken the cure. For the only begotten Son of God, by becoming man, recognised the value of the human race, and ennobled by His own dignity the nature He assumed. Finally, the physician should bear in mind that he himself is not exempt from the common lot, but subject to the same laws of mortality and disease as others; and he will care for the sick with more diligence and tenderness if he remembers that he himself is their fellow-sufferer."

These sentences express Sydenham's deepest convictions; they reveal his *religio medici*, and the same high tone is maintained through all his writings on medical subjects. He goes on to say that every physician who desires to be held an honest man should not only do his best to restore health to the sick, but also to give greater certainty to the art which he professes, so that it may become better and richer, and some benefit may accrue to mankind even when he himself is in his grave.

Sydenham does not omit, after the custom of the time, to anticipate the criticisms which his work may encounter. The carping critic or "Zoilus" is a figure whose shadow darkens most prefaces in the seventeenth century. Sydenham expects that supercilious persons will first pronounce his new method to be merely the outcome of a love of novelty and paradox, and then, if they find that after all there is some good in it, will assert that it was all well known before. He does not write for such critics, but for serious and candid men who will put his method to the proof. If they do so he has no doubt that their experience will confirm his own, and they will cast another pebble on the heap which he has begun.

So much for the preface, which we have dwelt upon especially because it did not appear in the final edition of his work on Fevers, and, therefore, may sometimes have escaped observation.

The little book itself consists of four sections. (1) On Continued Fevers; (2) on Certain Symptoms which accompany Continued Fevers; (3) Intermittent Fevers; (4) Small-pox, under which he includes Measles. It bears out on the whole the claim that it is founded on his own observations, no other author being quoted or even mentioned, and is mainly practical concerning the treatment of fevers, though not without some theoretical explanations, which, however, occupy a subordinate place. To try and give an account of such a work from a modern point of view would be a method liable to fallacy, since, on the one hand, we are apt to misunderstand views so different from our own; while, on the other hand, we almost inevitably read into the text ideas very obvious to us, but which were not present to the author's mind. Therefore the best plan seems to be to try and show how the work appeared to contemporaries. Fortunately we are able to do this in a very satisfactory way; for almost immediately after the publication of Sydenham's book, a notice of it appeared in the second volume of the "Philosophical Transactions" (afterwards called the "Transactions of the Royal Society"), dated May 6, 1666. It was probably written, as Dr. Latham remarks, by one of the two secretaries of the Royal Society, Hooke or Oldenburgh. The notice is headed, "An Account of Dr. Sydenham's book, entitled *Methodus Curandi Febres, etc.;*" and, as will be seen, is purely

expository, not critical. We can give only a few extracts.

"This book undertakes to deliver a more certain and more genuine method of curing fevers and agues than has appeared hitherto. And it being premised *First* that a fever is Nature's engine which she brings into the field to remove her enemy; or her handmaid either for evacuating the impurities of the blood, or for reducing it into a *new state*:—*Secondly*, that the true and genuine cure of this sickness consists in such a tempering of the commotion of the blood, that it may neither exceed nor be too languid. This, I say, being premised by the author, he informs the reader:—

"In the *First Section*, of the different methods to be employed in the cure of fevers, not only in respect of the differing seasons of one and the same year, but of the difference of one year from another. As to the former, he shows in what sort of *patients*, and at what time of the fever phlebotomy, or vomiting, or both, are to be used; and when and where not; in what space of time the *depuration*, if Nature be not disturbed or hindered in her work, will be performed; when purgatives ought to be administered, &c.

"As to the latter, he observes that one of the chief causes, rendering the cure of fevers so uncertain and unsuccessful is, that practitioners do accommodate their observations, which they take from the successful cure of some fevers in one season of the year, or of some one year, to that of all fevers in any season, or

in any year whatsoever. And here he observes *first* how vigorous the blood is in the *spring*, and how dispirited in *autumn;* and thence regulates the letting of blood, &c. *Next*, how difficult it is to assign the cause of the difference between the fevers of *several years*, &c.

"In the *Second Section* he treats of the symptoms accompanying continued fevers, as phrensis, pleurisies, coughs, hiccups fluxes, &c., showing whence they are caused, and how they are to be cured. . . .

"To all which he subjoins a particular account of the iliac passion (or Ileus) esteemed by him to be sometimes a symptom also of fevers, not only discoursing of its cause, but adding also a very plain way of curing the same, and that not by the use of quicksilver or bullets (judged by him to be noxious), but only by mint-water, and the application of a living whelp to the patient's stomach to strengthen the same, and to reduce it to its natural motion."

[This curious prescription of applying a live puppy dog to the patient's stomach was maintained by Sydenham in his last edition.]

"In the *Third Section*, he treats of intermittent fevers or agues. When he discourses of the cold and hot fits, and of the separation of the subdued aguish matter, distinguishes ague into vernal and autumnal, takes notice that as there are very few continued fevers, so there are only quotidians and tertians in the spring; and only tertians and quartans in the autumn.

He intersects, among other things, this note :—That the period of fermentation in fevers, both continued and intermittent, is (if left to Nature's own conduct, and well regulated, if need be, by art) performed in about 336 hours or fourteen days, subducting in *intermittent* ones the hours of intermission, and counting five and a half hours for every paroxysm, and imputing the excursion beyond that time to the disturbance given to nature by the error of practitioners.

"In the *Fourth Section*, the author in conformity with the custom of those who write of fevers, discourses of the Small-pox ; and examining the cause of this sickness, and its universality, delivers his peculiar opinion of the blood's endeavouring a renovation or a new texture (once at least in a man's life), and is inclined to prefer the same to the received doctrine of its malignity. . . . For the cure, he advises, in short, to permit Nature to do her own work, requiring nothing of the physician, but to regulate her when she is exorbitant, and to fortify her when she is too weak. He concludes all with delivering a model of the method he would use for his only son, if he should fall into this sickness."

On a few points in the above extract a little explanation may be useful. Sydenham's notion, which appears so strange to us, that there was a natural period of fourteen days for the "fermentation" in fevers, seems to have been founded on the observation that the most definite and well-marked species among the continued

fevers known to him (which were not then distinguished from one another), namely, Typhus, does usually come to an end in that time, so that it has been called the fourteen-days' fever. The other kinds, now known as Typhoid and relapsing Fever, would doubtless have appeared to him less regular and typical, so that he ascribed their departure from the type to unskilful treatment. The arithmetical subtleties involved in calculating the duration of intermittent fevers we cannot attempt to follow.

Sydenham's peculiar opinion as to Small-pox being a natural process which almost every one had to go through once, at least, in his lifetime, is undeniable evidence of the universality of the disease in his day, but is of so highly speculative a character as to appear out of harmony with Sydenham's usual line of thought. It is *omitted*, however, in his final edition, and the probable reason for this omission is worth noting.

We hear so much about the opposition to Sydenham and his doctrines, that we might imagine a considerable controversial literature to have been directed against him. But a pretty careful scrutiny of the medical literature of his time has discovered only one writer who directly attacked Sydenham's views. This was a certain Henry Stubbe, a physician at Warwick, a violent pamphleteer, especially conspicuous for his attacks on the Royal Society. He had been at Oxford at the same time as Sydenham,

and was there noted for his skill in carrying on scholastic disputations in Greek. He was doubtless a master of formal logic, and a man of immense reading, nōt to say learning, so that his friend Anthony Wood thought him one of the greatest lights of the age. It is plain that he made himself the champion of book learning and the ancient methods against the innovations of the Scientific School, the Baconians, or the Virtuosi; and especially of the Royal Society. Stubbe fell foul of Sydenham, probably because the dedication of his book to Boyle identified him as one of the "virtuosi," or at least a "semi-virtuoso," as his critic calls him.

The pamphlet in which this passage occurs is called "The Lord Bacon's relation of the sweating-sickness examined in a reply to George Thomson pretender to Physick and Chymistry, together with a defence of Phlebotomy, in opposition to the same author . . . Dr. Whitaker and Dr. Sydenham, &c. London, 1671."

Stubbe refers to the passage mentioned in the review, which is still stronger in the original, where Sydenham speaks of Small-pox as due to a spontaneous effort of the blood to bring itself into a new state, and putting off its native state, by a process like moulting, to put on, as it were, a new shape. He much prefers this view to that of a malignant substance received into the blood, which has to be expelled. But he says, if any one prefers the latter view, he will not

greatly quarrel with him, for the indications for treatment remain the same. Quoting this, and also another something like it, in which Sydenham speaks of fevers in general, Stubbe criticises them in the following words :—

"Whether Dr. Sydenham intend to ascribe sense, appetite, and judgment unto the blood I cannot well tell, but either he canteth in Metaphors, or explaineth himself in his general hypothesis about Feavers, as if his meaning were such. But it seems strange and irrational to attribute such an understanding to the blood, and to transmute a natural agent into one that is spontaneous ; and which is more, having represented it as such, to make it so capricious as not to know when it is well ; but to run phantastically upon such dangerous changes as occurs in putrid feavers and the Small-pox, for even this last '*ariseth from a desire the blood hath to change its state.*'"

Also Stubbe asks, if this disease is *Natural*, why is it not more ancient and universal? Whereas it is very doubtful whether it existed in ancient times, and it certainly was unknown in the West Indies till the Spaniards came there.

Again, he finds it "most intollerable" in Dr. Sydenham that he seems to attribute all the evil consequences of the Small-pox to the indiscretion of those that attend them, be they nurses or physicians.

Sydenham, we may add, spoke of certain bad symptoms of the Small-pox in a highly figurative

manner as due to the inability of the blood to carry through the mutation and renovation which it had begun. It cannot go back to its original state, and is not strong enough to go on to the new one which it is striving to induce. It can neither go backward nor forward, and the patient dies.

Sydenham's theory of Small-pox was not worse than that of his contemporaries; than that of Willis, for instance, who adopted the doctrine of the Arabian school; but it was totally different.

The objections to Sydenham's theory are just what would occur in any modern physician. They must have come home to Sydenham, who prided himself on abstaining from theories; so without making any reply to Stubbe he omitted the whole passage in his final edition. He did not, however, expunge the passage about the evil consequences of wrong treatment of the disease. To the end of his life Sydenham seems to have thought that the Small-pox, if properly treated, ought to be a very mild disease, and cause only a slight mortality.

But his manner of dealing with the first point is very characteristic of him. He was not averse from theorising, and sometimes indulged his fancy in giving speculative explanations of disease, but held theories to be of little importance, and would not allow them to influence his practice; or at least such was his intention, and to a very large extent he carried it out.

From these two notices we can see in what light Sydenham's book appeared to his contemporaries. The notice in the "Philosophical Transactions," while strictly impartial, showed that his little book was regarded as of some importance, and as tending in the direction of what we now call research, which was the especial object of the Royal Society; though in his conception of what were the most important objects of research Sydenham differed widely from most of the Royal Society men. The acute, though ill-tempered, criticism of Stubbe did not touch his general method, but picked out what was undoubtedly a weak point, and one decidedly inconsistent with Sydenham's general line of thought. Stubbe criticised also some details in Sydenham's treatment of Small-pox which need not be here considered.

On the Continent the "Method of Treating Fevers" was very well received. It was in the same year reprinted at Amsterdam. The Dutch printers of that time did good service to science by reprinting in a cheap form all valuable new publications in medicine as in other sciences, and contributed largely to the diffusion of Sydenham's writings through Europe. His reputation grew more rapidly in foreign countries than at home, as is often seen in the case of innovators in all departments of science.

To complete the literary history of the work on Fevers, we should say that a second edition, with some additions, especially that of a chapter on the

Plague, appeared in 1668. To this was prefixed a long Latin poem by John Locke, Sydenham's intimate friend, who deserves much credit for discerning the importance of Sydenham's little volume. We will quote the opening and concluding lines :—

In tractatum de Febribus D.D. Sydenham, praxin medicam apud Londinenses mira Solertia æque ac felicitate exercentis.

"Febriles æstus, victumque ardoribus orbem
Flevit, non tantis par Medicina malis ;
Nam post mille artes, medicæ tentamina curæ,
Ardet adhuc Febris, nec velit arte regi.
* * * *
Tu meliora paras, victrix Medicina ; tuusque,
Pestis quæ superat cuncta, triumphus erit.
Vive, Liber, victis Febrilibus ignibus ; unus
Te simul et mundum qui manet, ignis erit."

The subjoined rough version may give the English reader some notion of the heroic vein in which Locke praised his friend's work :—

"With Fever's heats, throughout the world that raged,
Unequal war has mourning Medicine waged ;
A thousand arts, a thousand cures she tries ;
Still Fever burns, and all her skill defies,
Till Sydenham's wisdom plays a double part,
Quells the disease, and helps the failing Art.
No dreams are his of Fever's mystic laws,
He blames no fancied Humour as its cause ;
Shunning the wordy combats of the Schools,
Where an intenser heat than Fever rules.
* * * *
Thy arms, Victorious Medicine ! more intend,
Triumphant, thou the unconquered Plague shalt end,
Live, Book ! while Fever's vanquished flames expire,
Thee and the world awaits one common fire."

Locke was so much interested in his friend's efforts to reform medicine that he and Sydenham planned a joint treatise on the Small-pox, which was to be dedicated to Lord Ashley (afterwards Lord Shaftesbury), Locke's friend and patron. Locke, indeed, wrote the dedication and the preface in Sydenham's name, which are still extant, in English, in the Shaftesbury papers. But the scheme was given up, and the materials were doubtless used in the composition of the work now to be spoken of.

Finally the work on Fevers was entirely recast, and with very considerable additions, making it three or four times as large, appeared in 1676 with a new title as "Observationes Medicæ circa morborum Acutorum Historiam et Curationem," which, notwithstanding the great alterations, must be regarded as the third edition of the little book on Fevers. The fourth edition (so-called on the title-page) of 1685 was further revised, but contained no important alterations. There were also at least two other Continental editions, printed at Strasbourg and at Geneva. It was dedicated, not to Lord Ashley, but to Dr. Mapletoft.

In this, Sydenham's greatest work, are contained numerous observations on the epidemic diseases of London, from 1661 to 1675. The leading principle in all his researches on this subject was to study for himself the bewildering variety of diseases known as fevers, discarding all traditional explanations and

even the traditional names, to observe them in fact as objects of natural history without being biassed by a premature attempt to account for their phenomena in accordance with the ancient dogmas or even according to the modern physical and chemical science. The book contains also observations on other diseases, such as pleurisy, pneumonia, and rheumatism.

It would be impossible within the limits of this work to give any analysis—even a short one—of the "Medical Observations." The accounts of the several diseases are not arranged, as they are in a modern text-book, according to the diseases themselves; but according to the epidemics of particular years. They were founded on Sydenham's own records of the diseases occurring in London from 1661 to 1675. In those years he recognised five periods, viz.: (1) 1661–4; (2) 1665–6; (3) 1667–9; (4) 1669–72; (5) 1673–5. Each of these periods was characterised by a particular *Epidemic Constitution*, or disposition of the atmosphere, and as many peculiar specimens of epidemics, viz., fevers. In the first, intermittent fevers predominated, accompanied by a peculiar species of continued fever. In the second, or pestilential constitution, occurred the Plague, along with pestilential fevers, analogous to but differing from the true Plague. In the third, or variolous constitution, Small-pox predominated, but was accompanied by a special kind of fever, produced by

the same epidemic constitution of the atmosphere, which he calls the variolous fever. In the fourth, or Dysenteric Constitution, beside Dysentery and "Cholera," or Summer Diarrhœa, there was a peculiar fever resembling Dysentery and an anomalous kind of Small-pox. The fifth constitution was characterised by a peculiar Comatose Fever, and by peculiar characters in the other fevers, as well as by an epidemic cough, in which we may probably recognise Influenza.

The general idea was that fevers change their characters according to the constitution of the year, and according to the prevailing epidemic. So that, for instance, any one knowing that a particular kind of Small-pox was prevalent, could pronounce what kind of fever would be prevalent at the same time, even without seeing a case; or, knowing the nature of the prevalent fever, could predicate the kind of concomitant disease which also prevailed, such as Small-pox, Measles, Dysentery, &c.

There is no doubt that this idea was founded on the histories of epidemics and their succession given by Hippocrates; and Sydenham has been blamed for expecting that the course of epidemics in London in his day would be analogous to that of Greece in the time of Hippocrates. But it does not appear that he was entirely misled by this consideration; for he expressly points out that Small-pox, and therefore the variolous constitution, with the disease dependent upon it, was unknown to Hippocrates. And he carefully

repudiates the belief that the succession of epidemics will in future years follow the same sequence as in the years to which his observations refer.

The conception, however, of a definite epidemic constitution in particular years was absolutely taken from Hippocrates; with the practical corollary that the diseases in particular constitutions required different treatment. Sydenham attached the greatest importance to this idea, as will be seen from the following extract.

"Just as an individual case of an epidemic has its proper periods, its stages of increase, crisis, and decline, so also has the constitution in general, which determines the epidemic; that is, proportionally to the time of its predominance it has definite periods; it increases from day to day in its epidemic extension; it reaches its height; it then decreases at the rate of its increases; and, lastly, it dies away altogether, making room for a new constitution."

The modern teaching would be that all this may be quite true of epidemics or outbreaks of particular diseases; but that it is not necessary to resort to the hypothesis of a purely imaginary "constitution" to explain them.

It was impossible for Sydenham to know, what medicine has established by long and painful observation during two centuries, that the species of fevers are constant, and that their successive prevalence is not due to atmospheric or climatic conditions, but

to a variety of circumstances, such as importation of germs from other countries, contagion, the influence of particular species of animals, and so forth, many of which can be controlled by purely mechanical arrangements, while heat, cold, moisture, and so on, play only a subordinate part.

Sydenham would have been quite prepared to learn, if he could have looked forward to these times, that the Plague never appeared again in England, that the intermittent fevers are practically extinct, and Small-pox reduced to very narrow limits. For he explicitly states his belief that some diseases would become extinct, and new ones, then unknown, would appear. But with the withdrawal of these formidable epidemics his whole system of epidemic constitutions crumbles to pieces. No one, however, was less disposed to believe than Sydenham himself in the finality of his own doctrines.

The most disappointing feature in Sydenham's account of fevers is that, notwithstanding their minuteness, it is extremely difficult to be certain what species of fever, as now understood, he is describing in any particular year. This partly arises from his tendency to believe that the forms and symptoms of fevers were continually changing under the influence of the epidemic constitution, and partly from the fact that he purposely abstained from giving in detail the histories of particular cases. In this he did not follow the example of Hippocrates, who has left

many histories of patients with the precise dates of their being taken ill and the occurrence of prominent symptoms. Had Sydenham done this it would have been much easier to identify his fevers. As it is, such an identification is difficult, and in the end uncertain.

In the sixth division of his work, where he speaks of certain acute diseases not generally called fevers, he may be said to have in some degree anticipated very modern views respecting these diseases. He refused to recognise them as *local* diseases originating in the organs affected. With regard to Pleurisy and Pneumonia, for instance, he insists that they are due to a general inflammation of the blood which causes the affection of the organs. So with Erysipelas, Rheumatism, and Quinsy. He regarded them all as *fevers to begin with*, not as feverish diseases arising from the local condition. He expresses these views with even greater confidence in his earlier editions.

Now though this would not perhaps be accepted at the present day as a quite accurate statement of the nature of these diseases, still it recognises the truth now more and more generally accepted that these diseases are not affections of one part of the body only, but what are called general specific infections. Skoda, the eminent professor of Vienna, held very nearly the same view about Pneumonia half a century ago, though it was regarded when he first propounded it as a startling innovation.

Without unduly prolonging strictly medical dis-

cussions, we must say one word about Sydenham's description of Scarlatina. He has been generally credited, and even by great authorities, with first clearly distinguishing this disease. In the opinion of the present writer this praise is exaggerated, though Sydenham certainly described this eruption more accurately than any one else. Sydenham could not have invented the word "Scarlatina," which, by its form and its traditional pronunciation, is evidently Italian in origin, and his description is strangely inadequate. He says nothing about the throat nor about contagion. He thinks the ailment (he calls it "the mere name of disease") is merely "a moderate effervescence of the blood, arising from the heat of the preceding summer, or some other exciting cause." It is without danger unless (in his favourite formula) aggravated by injudicious treatment, in which case the patient might die of his doctor. Either Sydenham in his long practice never saw a bad case of Scarlatina or else, when he did see one, he called it by another name. We are inclined to think the latter explanation the correct one. His error, like the errors of all great men, was not without bad consequences, for it largely contributed, in our opinion, to the misunderstanding of Scarlatina and sore throats in the next century.

But, with all deductions, this work will always remain one of the greatest of medical classics. The descriptions of many diseases and symptoms are so admirable and complete that they have never been

surpassed, nor are likely to be. Many flashes of insight and pregnant hints might be collected, which contemporaries did not understand, and to which later knowledge is only able to do justice. Above all, the resolute endeavour to study natural facts by pure observation, putting aside the theories, facts, and fictions collected out of books which, he says, "have as much to do with treating sick men as the painting of pictures has to do with the sailing of ships"—this endeavour, successful or not, will always be the best example of method to all students of medicine.

VIII

Sydenham's Shorter Writings
"Epistolæ Responsoriæ"

SYDENHAM was apparently not fond of writing, though he thought it a duty to publish his experience for the benefit of others, and probably want of health as well as want of leisure made composition difficult to him. His two next works were elicited from him by medical friends who urged him to give them his views on certain subjects, and who should be remembered with gratitude as having conferred a benefit on medical science by so doing.

The first was Dr. Brady, the eminent Regius Professor of Medicine at Cambridge and master of Caius College, who in a very complimentary Latin letter begs Sydenham to continue his observations on the fevers of London up to the present year (1679); and also asks his advice on the use of the Peruvian bark in Agues, and on the treatment of Rheumatism. Brady, we may observe, anticipates that Sydenham will meet

with malicious opposition and calumny ("malevolorum jurgia, et invidorum stigmata atque calumniâs"), displeasing though these will be to liberal and candid men.

The next to draw upon Sydenham's stores of medical knowledge was also an important man, Dr. Paman, Public Orator of the University of Cambridge, and Professor of Medicine in Gresham College, London. He reminds Sydenham in flattering terms of his promise to supplement his great work on Acute Diseases by a greater one, viz., on Chronic Diseases. He begs him therefore to write on a subject they had often discussed together, namely, the Venereal Disease, which was commonly and very badly treated by quacks, barbers, and the lowest mountebanks.

The answers to these letters were produced in a few weeks, and published together with the title "Epistolæ Responsoriæ duæ" in 1680, being dated February 8 and March 10, 1679–80, respectively. The copy presented by Sydenham to the College or Physicians is dated March 30, 1680.

These letters are really finished, though short treatises, and it may seem strange that they were composed in so short a time. No doubt, however, Sydenham had the materials ready. The observations on fevers must have been extracted from the notes which he regularly kept on the diseases of London. There is evidence also that a part of the tract on the

Venereal Disease was written as early as 1670, for the English MS. of the College of Physicians contains passages which agree word for word with the Latin tract. The final note in the MS. is, "And this is all that I know of this disease to the day whereon I write this, which is November 4, 1670." These facts illustrate Sydenham's method of composition, and show how thoroughly he founded all his writings upon his own carefully recorded observations. It is plain that he had accumulated a large store of similar observations. The Oxford MS., in the handwriting of Locke, called "Extracts from Dr. Sydenham's Physick Books," &c., must have been based upon materials of this kind. The first of the letters now published, that on Epidemic Diseases to Dr. Brady, contains a passage worth quoting.

"I have always thought (and not without reason) that to have published for the benefit of afflicted mortals any certain method of subduing even the slightest disease was a matter of greater felicity than the riches of a Tantalus or a Crœsus. I have called it a matter of greater *felicity*; I now call it a matter of *greater goodness* and of *greater wisdom*. For what more abundant instance of wisdom and goodness can any one display than (seeing his own share of our common nature) to continually refer such things as he has accomplished, not to his own glory but to the advantage of the world at large, of which he is so small and contemptible a particle? I agree with that

illustrious master of language and thought, my favourite Cicero, the leading spirit of his age, if not of the world at large, that 'as laws place the welfare of all men above the welfare of the individual, so a good and wise man, obedient to the laws, and mindful of his duty as a citizen, will think more of being useful to men in general than to any one or to himself.'

"Certainly it is clear that while to kill a man is the act of a criminal it will be the duty of a good man to seek to save life, or teach others how to do so, when he himself is in his grave. For it is an inhuman and detestable sentiment that it matters nothing to us what happens when we are dead, even if the whole world should be destroyed."

"DISSERTATIO EPISTOLARIS."

Sydenham's next work was also called forth by the request of a learned friend, Dr. Cole, of Worcester, who wrote to him in November, 1681, asking for further advice on the management of Small-pox, which he had been treating with the greatest success, by Sydenham's methods. A common friend, Mr. Kenrick, had told him that Sydenham had some unpublished observations on this disease; and had also hinted that there were some new observations on Hysterical Diseases which also he hoped Sydenham would publish for the benefit of the present age and posterity.

Dr. Cole (who was not personally known to

Sydenham) was a man of ability and learning, who, though not holding any academical position, had acquired a reputation by his writings on Apoplexy and other subjects. He afterwards wrote a work on Fevers, of a very different kind to Sydenham's.

Sydenham's answer was completed by the next January, and though it is longer than the two former letters taken together, Sydenham explains that he is obliged to be short, because his health was so shaken, especially at that time of the year, that if he were to indulge in any deep train of thought, it would bring on an attack of Gout.

The letter appeared in 1682 with the title "Dissertatio Epistolaris ad Gulielmum Cole." The presentation copy in the College of Physicians is dated March 21, 1681–2.

The first part of the letter deals with the treatment of confluent Small-pox. In it occurs the name of Dr. Goodall, who, as an intimate friend, sent Sydenham the account of a case of Small-pox under his care. Sydenham's mention of him is remarkable.

"Dr. Goodall was the friend who, when many men ventured to assert that I had done but little in the investigation and cultivation of medicine, threw himself in the way of my maligners, and defended me with the zeal and affection of a son towards a father."

Now Goodall was something more than an eminent Fellow of the College of Physicians. He was the

historian of the college, and a warm defender of its rights; he was indeed a typical College physician. So that his chivalrous defence of Sydenham is a fact not without importance in considering the attitude of the College towards the great innovator in medicine.

The second part of this letter, relating to Hysterical Diseases, is more important than the first, since the clear recognition of Hysteria as a special form of disease is rightly thought to be one of Sydenham's titles to originality in Medical Science.

When we look into his treatise, we find, however, that he had a very different notion of the disease from that of modern physicians. He says that Hysteria is the commonest of all chronic diseases. As Fevers make up two-thirds of all diseases, and chronic diseases the other third, one-half of this third is constituted by Hysteria. So that by this liberal estimate Hysteria is responsible for one-sixth of all human maladies. Women, he says, except those who lead a hardy and robust life, are rarely quite free from it; and women, be it remembered, form one-half of adult persons.

Those men who lead a sedentary or studious life, and grow pale over their books and papers, are subject to the same complaint. In their case it is indeed called Hypochondria; but this disease is as like Hysteria as one egg is like another. Men are less subject to it than women, not on account of the difference of their organs, but because of their more

robust habit of body, as contrasted with the fine and delicate organisation of women. But he clearly recognises the occurrence of Hysteria in men, and gives a very good case, which has been quoted with high approbation by a modern French physician.

Sydenham's pictures of the symptoms of Hysteria in women, which have often been quoted, are vivid and true; though he says the symptoms are so numerous and proteiform that it would be impossible to enumerate them all. Moreover, his general explanation of the affection, if translated into modern physiological language, is essentially what is now held. It all depends, he says, upon an ataxia or disturbance of the "animal spirits," which, rushing down upon the various organs of the body, excite pain and spasm; and in short "create the proper symptoms of that part."

Now the word "animal spirits," "psychical pneuma," or "breath of the soul," as carefully defined by Galen, is almost precisely the equivalent of "nerve-force" or "nervous energy," as used in modern books—phrases which, if more plausible on the one hand, are on the other hand, equally vague.

So that, interpreted in modern language, Sydenham's explanation comes to this: that in Hysteria there is a "disturbance of nervous energy" or "disordered innervation" which affects different parts of the body, producing functional disturbances which simulate organic disease.

Even those who think that Hysteria defies definition must admit that this explanation is a very fair statement of the observed phenomena. And with this the whole traditional fabric of hypothesis indicated by the etymology of the word Hysteria fell to the ground.

With Sydenham's exaggerated notion of the importance of Hysteria, it was natural that he should carry his doctrine into extremes. He thought this affection not only produced the symptoms of disease, but set up actual organic diseases. Chlorosis he regarded as a hysterical affection, and attributed to the same ataxia of the spirits, the production of ovarian dropsy in women, which to modern experience seems like putting the cart before the horse.

In the treatment of Hysteria, as he understood it, Sydenham again showed his good sense. Although unable to dispense with the traditional remedies, bleeding and purging, he held the chief curative indication to be "the restoration of the blood." For this purpose he gave chalybeates, and it is curious to observe that he preferred steel in substance, *i.e.*, steel filings, thinking them much more efficacious than any chemical preparation of the metal. This practice, at that time common, has, of course, given rise to the customary medical phrase of "prescribing steel" when chalybeates are given.

It may also be worth noting that Sydenham thought cinchona bark very useful in Hysteria and Hypo-

chondria. Although he was certainly not the first to use bark for Agues, he does seem to have been the first who used it as what we now call a Tonic.

When the doctor of to-day prescribes his salts of quinine and salts of iron as tonics, he often says he is giving bark and steel. But what is hardly more than a metaphor with us would have been a literal description of what Sydenham prescribed.

"TRACTATUS DE PODAGRA ET DE HYDROPE."

In the following year, 1683, Sydenham brought out an independent work, not due to the prompting or solicitation of any of his friends. It was a short Latin treatise on two diseases, Gout and Dropsy; the former part especially being justly regarded as of very great importance.

The copy which he presented to the College of Physicians is not dated, but we may suppose that it came out about June, since the dedication is dated May 21, 1683.

On the title-page is a motto from Sydenham's favourite author, Bacon, which he used also in a subsequent work, "*Non fingendum, aut excogitandum, sed inveniendum, quid Natura faciat aut ferat.*" ("We have not to imagine, or to think out, but to find out what Nature does or produces.") No words could more truly express Sydenham's method. As there is only one true method in science, we are not surprised at finding the same advice given a century later by

Hunter to Jenner in the often-quoted words, "Do not think: try!" or more correctly, "Why think? why not try the experiment?"

The book was dedicated to Dr. Thomas Short, an eminent Fellow of the College of Physicians. Sydenham says he presents this little tract in place of the larger volume which he had intended to write on chronic diseases in general. This longer work he had been unable to complete, for so soon as ever he applied himself seriously to composition he was interrupted by a severe attack of the Gout. Therefore he must confine himself at present to treating of these two diseases. He dedicated his work to Short for two reasons. First, because Short had recognised the value, and publicly expressed his high opinion of Sydenham's former writings when they had been slighted by others; and secondly because, in frequent consultations with his friend, he had learned to know his practical skill in medicine; and that, though versed in all kinds of learning, he preferred the niceties of practice to empty speculations. If his labours commend themselves to this friend, and those few other good and honourable men whom he counts his friends, he will care nothing for the hostility of those others who attack him because he thinks otherwise than they do of diseases and their cures.

"It is my nature," he says, "to think where others read; to ask less whether the world agrees with me than whether I agree with the truth: and to hold

cheap the rumour and applause of the multitude. And what is it indeed? Is it any great thing for a man to do his duty as a good citizen, to serve the public to his own private loss, and to take no glory for doing so? If I take a right measure of the matter, I am now so old that to study my own reputation will soon be as if I studied the reputation of one who is not. For what can it profit me after my death if the eight letters which compose the name *Sydenham* should pass from mouth to mouth among men who can no more form an idea of what I was, than I of what they will be; of men who will know none of those (then dead and gone) of the generation before them; who will use other language and have other manners; such is the inconstancy and vicissitude of all things human."

Sydenham goes on to say that his health will prevent his troubling the world much longer with medical treatises. In writing this his hand shakes so much that he can hardly hold the pen; and he gratefully acknowledges the help given him in its composition by a good friend, Mr. John Drake, of Christ's College, Cambridge.

The treatise on Gout is the more important of the two, and has been generally regarded as Sydenham's masterpiece. He says that having himself suffered from the disease for thirty-four years, he must be of a slow and dull intelligence if his observations on a disease peculiarly his own are so unsatisfactory as he

fears after all that they are. But he will honestly put down what he knows about it.

It would be out of place here to discuss the purely medical aspect of Sydenham's views on this disease. He gives a full account of the causes and dispositions which predispose to it, with a description of its attacks, so vivid and accurate that it has never been surpassed, and remains to this day absolutely classical. Any teacher of medicine even now who may be tempted to try and improve upon Sydenham's picture of a fit of the Gout will probably find that he had better stick to the actual words of the great Gouty Physician.

It has often been said that Sydenham seems to have been a little proud of his liability to this complaint, as being the special appanage of distinguished men. If this observation be just, let the reader judge.

"It may," he says, "be some consolation to those sufferers from this disease, who like myself and others are only moderately endowed with fortune and intellectual gifts, that great kings, princes, generals, admirals, philosophers, and many more of like eminence have suffered from the same complaint, and ultimately died of it. In a word, Gout, unlike any other disease, kills more rich men than poor, more wise than simple. Indeed, Nature, the mother and ruler of all, shows in this that she is impartial and no respecter of persons; those who are deficient in one respect, being more richly endowed in another; her munificent provision for some men being tempered by an equitable

proportion of evil. Hence that law universally recognised that no man is *ex omni parte beatum*, nor yet on the other hand in all respects miserable. And this mixture of good and evil, especially appropriate to our frail mortality, is perhaps the best thing for our happiness."[1]

At the end of the book on Gout, Sydenham says that if he should seem to have been niggardly in his list of medicines for this complaint, he will make up for the deficiency by giving a long catalogue collected by Lucian in his Τραγῳδοποδάγρα, or "Gout-Tragedy," a whimsical sort of comedy in which Podagra appears as one of the characters, boasting her invincibility, and ridiculing the pretensions of those who profess to have found a remedy for her torments. Two unhappy doctors who made this empty boast are brought in and tortured with the pangs which they pretended to relieve, till they cry for mercy. In a concluding speeeh Podagra recounts the long list of some fifty useless remedies which have been directed against her in vain, promising the sufferers that if they will do nothing to resist her, she will be much kinder to them.

Finally, the Chorus of sufferers renounce all their pretended remedies, and promising to do nothing to resist the invincible Podagra, throw themselves on her mercy.

[1] Sydenham, perhaps, did not know the saying of the witty Father Balde, who called Gout "*Dominus morborum et morbus Dominorum.*"

The wisest sufferers from Gout, who know how useless all treatment is, will, Sydenham thinks, agree with the Chorus. The moral apparently is that the less you do against Gout the better; not a very hopeful conclusion either for the sufferers or for the physician.

The short tract on Dropsy which forms the second part of this volume is much less important and valuable than that on Gout. This could hardly be otherwise, because Sydenham did not and could not understand the true nature of this complaint. We now know that it is not a disease in itself, but a condition arising from several different diseases or causes. Sydenham had no explanation for it but a watery state of the blood, entirely ignoring the alteration of the blood-stream and mechanical causes which are largely concerned in producing this condition. Now these causes were no doubt at that time imperfectly ascertained; but Sydenham does not recognise what was actually known, nor what was being discovered by his contemporaries, the anatomists, who were engaged in carrying on the work of Harvey. It is a notable fact that Sydenham never once in his writings mentions the name of Harvey; nor does he seem to have had any notion of the importance of Harvey's discovery. Probably, had he been asked about it he would have said that no doubt all this was quite true, but that it made no difference to practical medicine. If he had said any such thing, it would not have been without

excuse. For in the class of diseases which Sydenham especially cultivated, namely Fevers and the like, Harvey's discovery had no great practical application; and little or nothing would have had to be changed if Sydenham had more clearly taken into account the circulation of the blood.

But in the case of Dropsy and some other diseases such as Apoplexy, disturbances of the circulation are of primary importance, and without considering these such diseases could not be accounted for.

At this very time Lower, with Christopher Wren and other experimenters at Oxford, were making researches on Dropsy, founded on a knowledge of the circulation, which Sydenham entirely ignored. Lower did more to explain, and thus to suggest appropriate treatment for, Dropsy than Sydenham and other observers equally acute could have discovered by many years of pure observation; more, in fact, than centuries of observation had done before. Sydenham, however, totally neglected the researches of the anatomists and physiologists, and even spoke of them with contempt. It would not be fair to say, however, that he thought a knowledge of anatomy quite useless. In this very treatise he discusses the question. He quotes the saying of Hippocrates (or a Hippocratic writer) in the work "On Ancient Medicine," controverting the doctrine of certain physicians and sophists that no one can understand the art of healing without knowing what man is, how he first came to

exist, and so on, all which the writer says has less to do with the art of healing than with the art of painting.

Probably the writer did not refer to the structure of the body so much as to philosophical speculations on the origin of man. However, Sydenham, supposing that anatomy was meant, takes occasion to say that a physician ought to know the structure of the human body. But he says this kind of knowledge is very easily obtained, by dissection of men or brutes, and even by persons of little wit or judgment. Evidently he thought a very general knowledge of the subject was quite enough. Even then, he says, there is in acute diseases (that is in two-thirds of all diseases) "something divine," a specific property, which the structure of the body will never explain. (Modern science admits the specific factor in such diseases, but calls it a microbe instead of a divine element.) Sydenham goes on to use the very dangerous argument from ignorance. "We may know," he says, "the larger organs of the body, but its minute structure will always be hidden from us. No microscope will ever show us the minute passages by which the chyle leaves the intestine, or show by which the blood passes from the arteries to the veins." Now the fact was that the last-mentioned passages, or capillaries, had been demonstrated under the microscope by Malpighi in 1661, more than twenty years before; and the minute lymphatic ducts, though demonstrated later, are now plain enough.

Sydenham, we must admit, not only undervalued, but was ignorant of what had been done in anatomy. In another place he says, using the same argument from ignorance, that the human intellect will never be able to understand the use of the different parts of the brain, forgetting that Galen, many centuries before, had shown by experiment much more about this matter than Sydenham recognised, and that his own contemporary, Willis, was extending that knowledge in a remarkable degree. He lays down a still more dangerous principle when he says that "a little research teaches us *how much knowledge* is enough for the guidance of those who claim to be healers of disease"; which in the light of modern research we may say is just what no experience ever has taught, or is ever likely to teach us.

So much it seems desirable to say in order to show that Sydenham, like many original investigators, was somewhat one-sided; and, absorbed in the study of medicine by his own method of pure observation, ignored the results obtained by other methods, and by the anatomical and physiological schools, which was the school of Harvey.

Sydenham's method was admirable in studying the class of diseases to which he especially devoted himself. But in others, namely, in organic diseases and most chronic maladies, it was insufficient. Perhaps this was one reason why his long-promised work on chronic diseases never appeared. He may have found

the task more difficult than he imagined. At all events, these considerations explain why the treatise on Dropsy was so inadequate.

"SCHEDULA MONITORIA DE NOVÆ FEBRIS INGRESSU."

In September, 1686, Sydenham brought out the last medical work which was published during his lifetime, with the above title, which means "A sketch by way of warning of the approach of a new Fever," that is, a new species of fever which he had observed in the course of the year. The term "New Fever" was used both by Sydenham and others for certain epidemics of Fever differing from what had been observed before. Whether this particular epidemic really was one of a new disease it is difficult to say. As before remarked, there is often great difficulty in determining to what species of Fever Sydenham's descriptions, elaborate as they are, apply. This disease seems to have presented some features like those of Enteric or Typhoid, but on the other hand, as it began in the spring we can hardly identify it with that disease, and must leave the question undetermined. The little book contains also observations on other maladies, and on the whole must be considered a sort of supplement to his larger works.

It was dedicated to Dr. Charles Goodall with expressions of gratitude and friendship which we have quoted before. There is a final chapter on Calculus,

giving Sydenham's account of his own habits of life, which also is given elsewhere.

Perhaps the most notable passage in the book is one where Sydenham incidentally gives a description of St. Vitus's Dance or Chorea. This has been greatly admired by some physicians as a masterpiece of description. One modern writer on the subject, the late Dr. Sturges, on the other hand, pronounced it to be so imperfect a description that the disease could hardly be recognised from it. To decide where doctors disagree is proverbially hard, but we must confess we lean to the opinion that it is not a very complete picture of the disease, though undoubtedly it seizes the most salient features.

But the historical importance of this short account was very great. Here Sydenham first clearly separated this common disease of children from the rare epidemic hysterical disorder formerly called St. Vitus's Dance, or, "the dancing mania of the Middle Ages." Several historical records of the outbreaks of this extraordinary nervous malady remain, and have been collected in Hecker's well-known work on the epidemics of the Middle Ages. But this has in reality nothing whatever to do with our modern disease called Chorea, and as it never occurred (so far as we know) in England there could be no confusion in the mind of an English physician. On the Continent, however, such a confusion was still possible. Hence the importance of Sydenham's description was at once recognised, and

the disease in question was often and for long afterwards called "Sydenham's Chorea" (a name still occasionally met with), or "*Chorea minor*."

This was the last product of Sydenham's literary activity. At the end of the book, dated September 29, 1686, he states that he has now delivered nearly all that he knows respecting the cure of diseases.

IX

Medical Practice in Sydenham's Time

TO understand what there was novel or unusual in Sydenham's methods we must consider what kind of professional world it was into which he made his way when he settled in London.

Never was there a period when the medical profession underwent a more rapid change than it did in London after the Restoration. Before the Civil Wars physicians in London had been a very limited and, on the whole, a very uniform class. They were guided chiefly by the Galenical tradition which had at first only acquired new strength by the Revival of Medical Learning; and in this revival Linacre and other early Fellows of the College of Physicians had played a distinguished part. The great discovery of Harvey, which seems to us now so signal a landmark in the History of Medicine, had introduced no change in its practice. The traditions of the classical school still bore almost undisputed sway, and the English physician

was still the formal and learned scholar such as Linacre had intended to make the type of a Fellow of his College.

The only other school of Medicine which had any distinct name, or formed a distinct school in practice, was the *Chemical*, or Spagyrical, constituted by the disciples of Paracelsus and Van Helmont. But in England, at least, the chemical physicians were at that time a small and discredited class. Their exorbitant pretensions to infallible skill and their trafficking in secret remedies caused them to be ostracised by the College of Physicians. The very name "*Quack*," originally "*Quacksalber*," invented for them, is an index of their position. For this meant originally nothing more than *Quecksilber*, or Quicksilver, the German name for mercury, a drug the use of which was one of their distinguishing marks. The long controversy of the College of Physicians with a certain Anthony, a chemical physician, who had a secret remedy called *Aurum Potabile*, or "Potable Gold," shows the essential antagonism between the quacks and the regular practitioners.

But during the Civil Wars and under the Commonwealth the upheaval of thought and disregard of traditional opinion put a sort of premium on unorthodoxy which gave the quacks a greater vogue; and the laxity of professional restrictions degenerated into an unbridled license vexing to the souls of the orthodox physicians. About this time and later a

number of books on chemical medicine appeared in London.

After the Restoration the bonds of professional discipline were drawn tighter, and it might have been expected that a greater uniformity of practice would have resulted, but for several reasons this was not the case, while the strife of conflicting opinions and methods of practice became keener than ever.

One reason of this undoubtedly was the growth of the scientific movement, of which the tangible expression was the foundation of the Royal Society. The growth of physical science naturally tended to foster scepticism in regard to traditional doctrines of all kinds. Scientific men were not likely to be deterred by the censures of the orthodox physicians from extending a wide tolerance to novel theories and systems of medicine. Hence the "virtuosi," as the scientific men were named or nicknamed, incurred the odium of many of the old school of physicians by their supposed partiality for quacks and irregular practitioners. Robert Boyle, perhaps the most eminent of the "virtuosi," who took great interest in medicine, not only encouraged with intelligent sympathy the early labours of Sydenham, but dabbled in chemical remedies, and had a good word even for the most notorious *arcanum* of the quacks, the "*Aurum Potabile*." He is probably pointed at in the diatribes of the orthodox physicians against the "virtuosi" of which we shall presently give a specimen.

Another factor of great weight in producing the motley diversity of medical practice in Sydenham's time was undoubtedly the personal influence of Charles the Second. It is true that on the one hand the King sanctioned, and, it is said, ordered a medical regulation of a most conservative kind, namely, the limitation of the Fellowship of the College of Physicians to doctors of Oxford and Cambridge. This singular restriction of the highest honours of the profession to graduates of two universities which could not, from the nature of things, give efficient medical teaching, and thus could produce only a very limited number of physicians, was an innovation. In old times the College had welcomed graduates of Padua, Leyden, and other Continental schools, without requiring them to pass through an English University. The wisdom of the new regulation has been much questioned. On the one hand, it undoubtedly maintained that standard of learning and dignity by which the London College has, by general admission, always been distinguished. On the other hand, it kept many of the most able and distinguished physicians of the succeeding century in a subordinate position, and in the end had that fossilising tendency which bigoted exclusiveness never fails to induce.

But, whether right or wrong, no doubt it commended itself to Charles and his advisers, not as maintaining the dignity of the College, but as a part of the policy by which Roman Catholics, Presbyterians,

and Nonconformists were to be kept out of all important public positions.

On the other hand, Charles II., partly through one of the most favourable points in his character, did more to lower the dignity of the profession in another way than he could have done by encouraging the restrictions just mentioned.

No one can doubt that whatever Charles's faults as a king, he was a man of acute and lively intellect. He took a genuine, if somewhat languid, interest in physical science ; he kept up a laboratory in his own palace, and his patronage of the Royal Society was not a mere affectation. Science in England has every reason to be grateful to him for the dignified and assured position which by this foundation he gave to it. But these very scientific proclivities led him, unfortunately, to give his countenance and patronage to quackery of every kind, reputable or disreputable. Beside his regular physicians, he dignified certain persons of discreditable character with the same title. One John Archer, a writer of disreputable books and vendor of secret remedies for diseases not willingly named, who might in these days be prosecuted as an obscene quack, calls himself "Chymical Physician to his Majesty" (though his chemistry was certainly not that of the Royal Society), or "His Majesty's Physician in Ordinary," and boasts that the King recommended several noble persons to his care. Another of the King's physicians in Ordinary was

Gideon Harvey, afterwards Physician to the Tower, not a person of the stamp of Archer, for he was a graduate and an educated man, but chiefly known as the author of scurrilous pamphlets, written with plenty of vigour (and, it must be admitted, not without wit), attacking other physicians under transparent disguises, and especially the College, which for some reason did not admit him as one of their body. Sydenham himself is evidently referred to in one place as "a trooper turned physician," and probably as "a Western *Bumkin*, that pretends to *Limbo* children in the Small-pox by a new method." Charles certainly read these libels, at least "The Conclave of Physicians," and though he is reported to have censured a too violent attack upon the eminent Dr. Willis, one can imagine the merry monarch chuckling over Harvey's jokes at the expense of the Institution of which he was supposed to be the official patron.

Nor was the King more particular, as might be supposed, about the moral character of those whom he honoured with his patronage. His favourite physician, Sir Alexander Frazier, is mentioned in Pepy's Diary as notorious for practices which in our times might bring him within the grasp of the criminal law. It is a striking testimony to the loyalty of the College of Physician, that no word of complaint was ever heard of the scandalous manner in which official patronage was dispensed by the founder of the Royal Society and Patron of the Royal College. But it is easy to

imagine the difficulty which an honest and upright physician must have had in steering his way among this crowd of quacks and sycophants.

Another set of irregular practitioners were the astrologers, who about the middle of the century abounded in England. Not content with drawing horoscopes and ordinary fortune-telling, men like Culpepper, Lilly, and others trespassed on the province of the physician, and practised physic by the light of the stars—a method once indeed recognised in orthodox medicine, but by this time discredited.

In addition to all these there was the great crowd of base empirics, herbalists, water-casters, and the like, who made no pretensions to chemistry or astrology, but with abundant effrontery offered to sell remedies for every complaint. Mountebanks from country fairs blowing their trumpets in the streets; hawkers of amulets, charms, nostrums; charlatans and impostors of every name and colour, plied their trade with little hindrance on the part of the law. All through the seventeenth century both physicians and surgeons complain bitterly of these ignorant pretenders. Laws were made against them, with powers given to the College of Physicians to enforce, but there seems to have been great difficulty in making them effectual, so that the quacks and empirics flourished abundantly.

After the male quacks came a great crowd of females—midwives, nurses, and "wise women"—to

sweep up the remaining crumbs of the medical feast.

Besides having to sustain competition of various kinds of spurious physicians, the regular doctors had their practice much cut into by the surgeons and apothecaries. Surgeons were not allowed to prescribe for internal maladies, nevertheless they did so. Apothecaries were supposed to make up the prescriptions of the physicians for individual patients, but really they made very lucrative use of the prescriptions which passed through their hands by supplying them without the orders of a physician to any patient whose case seemed similar. One apothecary is said to have boasted that he made a hundred times as much out of a certain prescription as the physician got for writing it. Besides which, as was natural, they prescribed for a multitude of patients without troubling the doctor at all, so that Gideon Harvey reckons the apothecaries had fifty to one hundred patients to the physician's one. "Hence," he says, "five-sixths of the physicians go with their hands in their pockets all day, the greatest part of business passing only through few men's hands (though some of them are much more ignorant than the others), whereas there is scarce any little apothecary, but one time or another in the day there is life perceived in his mortar. Now this scarceness of business being by Physicians imputed to too great a share one hath before another makes them growl and snarl at one another, like so many barking

animals at a bone in the water they can't come at."

Thus while one class of apothecaries worked for the physician, probably as much to their mutual advantage as in Chaucer's time, when, as he says of the Doctor and the Apothecary—

> "Each of them made other for to winne
> Their friendship was not newe to beginne,"

there was another class who practised quite independently of the physicians, never calling them in, except occasionally to fortify their own position, or to renew their stock of prescriptions. Many attempts were made to check this abuse, about which numbers of polemical pamphlets were published; but in vain. Dr. Goddard, the Gresham Professor, proposed that physicians should compound their own medicines, and himself did so, producing the celebrated Goddard's drops, which were highly approved of by Sydenham.

It should be observed that physicians and surgeons were at this time absolutely distinct; and physicians educated in England had no opportunity of learning any surgery; while it was also often asserted that they had a very imperfect knowledge of the science of the apothecary. So what with "virtuosi," the chemical quacks, royal favourites, surgeons, prescribing apothecaries, astrologers, base empirics, midwives, and old women, it was a motley rout of competitors that the honest physician had to contend with. No wonder

there was grumbling and bitterness. The profession was going to the dogs—this, at least, is what was generally said in the profession.

Dr. George Wharton, an eminent physician and anatomist, summed up the matter in the following reasons, which he gave to dissuade a young man from embracing Physic for a livelihood :—

"Because now there was more apparent cause of the ruine and destruction of Phisick than ever, by the swarmes of quackes, mountebanks, chymists, apothecaries, surgeons, and especially this new upturned brood of 'virtuosi,' who are most likely by their Jesuitisme and policy, English books, experiments and receipts in phisick, to fill all families of note in England with their stuff, to overthrow all our old settled and approved practice of phisick, especially in London : which is now miserably impoverished by its burning and building and desertion of trade, that they have scarce money for their present subsistance, little for phisick and phisitians, and like to have less hereafter. Soe that every one out of necessity and good husbandry must become theire owne phisitians and make their owne phisick. For all our ladies and gentlewomen keeps and stores up receipt-books and closetts of medicines fitted for most occasions.

"Besides, Phisick is too much overstocked with students graduated from the University. For I doe really believe it will easily appear that now there

is in England 400 for one phisitian that was formerly : so that it is impossible but that theire owne multitude must shortly ruine the profession without the plotts and envy of theire enemies. He that begins the practice of phisick must resolve to be a perpetuall slave and servant to the meanest and basest all the dayes of his life, and if he neglect one instant and committ one error, or speak the least word amisse, his fame and name is lost for ever to him ; and if his patient dye, hath killed him for certain, by the view of the people. Upon the Phisitian is imposed taxes, polls, great charges for houses and servants and entertainments, more in this age than ever formerly ;— Coaches, Jacks (?) and charges expected,—feastings. He is never called to any but miserable patients, where the apothecary or surgeon or chymist have been tampering soe that commonly the phisitian is brought only to take away the scandall of killing him to himself. The phisitian is made that common jeare of the hunt, neglected, contemned, and reproached upon all occasions ; and, which is worst, they will one reproach and scandalise another for his ill practize, which is very certaine and evident to all practizers."

In the meantime we turn to the regular orthodox academical physicians and ask what were their methods ? Honourable and respectable men, no doubt, but with certain weaknesses which did not escape so hostile a critic as Gideon Harvey, who,

though drawing with the pencil of a caricaturist, probably hit off some of their vulnerable points.

Some of the regular doctors, he makes out, had more learning than practical knowledge, and veiled their ignorance of disease under pedantic language and a pompous manner.

Harvey supposes "the Infant-physician so completely dressed up with School and Academic ornaments, and some new tinkling notions in medicine, that you may hear the clapper of his tongue echo from the East to the West-Gate of your town. Introduce him to a Patient, and grant that he by appuising or resting his velvet Body on his Japan crutch, and fixing his intellect, by drawing the broad brimmed beaver over his eyes, seemeth to mimick a decrepit gravity, and by that to weigh himself down to the bottom of your belly, to rummage for the disease: When he wakes (for he has only been in's dumps) out of this brown study, he shall no more know the Distemper or the cause of it (though he hath read it in authors twenty times) than the skipper that never was tossed on the ocean before pretends to find out Bermudas by his Waggenaer. Nevertheless doth he adventure to call for paper and ink, to figure down a remedy he never saw before, being only acquainted with the bare name of it."

The basis of truth here was that most English physicians had to gain their experience at the expense of their earlier patients. The custom for young

doctors from the Universities to spend a short time at one of the London hospitals was only just beginning, and was by no means universal. Physicians of Sydenham's generation had probably never attended a hospital unless they had studied abroad.

Other physicians, Harvey suggests, based their pretensions to medical knowledge on their researches in Anatomy. "They flay Dogs and Cats; take livers, lungs, calves-brains, or other entrails, dry, roast, parboil them, steep them in vinegar, &c., and afterwards gaze on little particles of them through a microscope:—then obtrude to the world in print whatever false appearances gleamed into their eyes; and all this to no other end, than to beget a belief in people that they who have so profoundly dived into the bottomless pores of the parts, must undeniably be skilled in curing their distempers."

Really, our old physician becomes almost too modern! So we will only say that by this class of doctors whom he nicknames the Anatomical Physicians, Dog Flayers, or Calves Head Dissectors, he intended to hit off such men as Wharton, Glisson, Lower, and the great Willis.

When our doctor was started in practice it appears, according to Harvey, the main points were to have a good understanding with the apothecaries, and to be seen regularly at church.

"The church door shall no sooner be opened but *ecce* Mr. Doctor, sitting in the most visible seat, Grave,

Deaf, Dumb, and immoveable as if an Apoplexy of Devotion had seized him, out of which his Apothecary is to raise him by knocking at half-sermon at his pew-door to fetch him away post to a dying patient; by which means he draws the eyes of the whole congregation after him; but instead of going to the pretended House of Visitation they both drop into a cabaret, there to pass the fatigue of a forenoon Sunday. This knack of confederacy is to be repeated several Dominical days, until it hath made an impression of the people, that he is a man of importance, and of great Physick business."

Here again, we can only say, how modern! Did Bob Sawyer—late Nockemorf, in the "Pickwick Papers," descend straight from the seventeenth century? or is it only that human nature, in like circumstances, acts in like manner?

Several well-known physicians of the time are glanced at in Gideon Harvey's scurrilous caricatures, such as the "Sieur de Tattle," who frequents the conventicles of all sects, making a vast inroad into the good opinion of the Zealots, and thus hauls in shoals of patients. The "Sieur Phlegmatique," whose constant attendance at church with a broad-brimmed hat, the little band, an austere gravity and dull countenance, soon gained him the title of an honest, conscientious, knowing physician. These might have been identified by their contemporaries, though not by us. But when we come across the

figure of a "*Quidam Doctor* that cures most desperate 'diseases by methods and remedies contrary to the opinion of all others'—of the '*Doctor of Contraries*,' who with opium and Jesuits' Powder shall make more various sorts of passes at diseases than ever any Roman gladiator with his weapon ; and these shall be hits, and do execution"—we wonder whether Sydenham is meant. This same doctor, called the "*Generalissimo*," treats Small-pox with spirits of vitriol and opium. Apparently the same allows in that disease abundant draughts of small beer, throws off the bedclothes, opens the windows, cools the room, and so forth. All these particulars are so exactly what Sydenham recommends that we cannot doubt the "Doctor of Contraries" is meant for Sydenham, and is the same with a "Western bumkin," who had been at the University.

From Gideon Harvey's gross caricature we may get some notion of how Sydenham would strike a contemporary, and some help in trying to reconstruct his outward appearance and personality.

SYDENHAM'S METHODS OF PRACTICE.

Thomas Sydenham, as we judge from his portraits, was of a large and robust frame, his complexion reddish, his eyes grey, his hair first brown, afterwards grey, worn long, in its natural state, without a wig. For his actual features we refer to the portrait. We suppose him to have been in his manner manly and simple, but perhaps somewhat rustic, rather than

polished and conciliatory—more the manner of a Dorsetshire squire and captain of horse than that of a courtly physician. He was essentially a man of action when most physicians were men of books. We can imagine him taking command of the sick-room and having his orders obeyed, with a rough word or two if things went wrong. He undoubtedly gained the most complete confidence of his patients; of this there is abundant evidence. But it would have been by his plain honesty and benevolence and the ascendancy of a strong nature rather than by pleasing and flattering. In his treatment he was eminently straightforward. Having made out the nature of the disease he adopted whatever means seemed best. Of drugs, bleeding, and other strong measures he was not sparing, but sometimes would give no medicine at all—a proof of unusual courage in those days. He was strict, though no pedant, about diet, but did not disdain simple and homely measures, such as fresh air and open windows. His only rule was, "What is useful is good." Hence he had recourse sometimes to very strange proceedings, such as the application of a puppy dog to give warmth to a patient, or even of a boy or a girl, as the case might be. Routine and precedent had little weight with him; and there was probably a grain of truth in what was said of him seriously by Blackmore, scoffingly by Gideon Harvey, that he made it his principle to go contrary to the practice of other physicians.

It is plain that such manners and practices would

not bring him popularity in his own profession, especially if he expressed in conversation, as he probably did, those strong opinions about the faulty practice of others which so often occur in his writings. And his popularity with the public is not likely to have been of rapid growth, though in the end his triumph was complete. He is certainly not likely to have sought to bring himself into notice by the methods satirised by Gideon Harvey : such as by pretensions to a knowledge of anatomy (which he despised), or by ingratiating himself with apothecaries, or by ostentatious regularity in attending public worship.

It may be well here to enumerate those points in Sydenham's treatment which were specially his own, as applied to various diseases.

First, in relation to Small-pox, his system of treatment, called "the Cooling Method," was certainly new in England, and acknowledged to be so, whether for praise or for blame, by his contemporaries. We cannot discover that it had been carried out in at all the same way by any Continental physician. Its merit can only be judged in relation to the treatment prevalent at the time ; and the matter will be best understood if we give it in Sydenham's own English, taken from his account of the Small-pox in the MS. of the College of Physicians.

"ON THE TREATMENT OF THE SMALL-POX.

"This I thought fitt to write both in regard that

what I formerly published concerning this disease in a booke of mine entituled *Methodus curandi Febres etc.* was less perfect for want of those opportunities of being thorowly informed, which since that time I have plentifully had, especially in the years 1667 and 1668, in both which the small pox raged more then scarce ever hath bin knowne; and likewise for that I am abundantly sensible of the great mischiefes that are dayly done through mistakes about this disease but especially about its cure, wherein a great pudder is wont to be kept, and the Patient frightened into the enduring the torment of being kept wholl weekes sweltering in his bedd and of being burnt up with cordialls. And all to noe other effect oftentimes than the destruction of the Patient, or at best his cure's appearing to have bin better then it was by his having bin made worse than he needed, both in respect of those great and dangerose accidents to which he was unnecessarily exposed during his sickness, and likewise of the disfiguring impressions remaining oftentimes on his face after recovery that otherwise would certeynly have bin avoided.

"Truly the just indignation I have both at the folly and cruelty of the received practise in this disease, provokes me to appeale to the less fallible because common reason of mankind whether the event were not to be suspected, if the stoutest Porter or some such person under the happiest circumstances of health and vigour, should be taken from his business and for

experiment sake should be put to bed, where with the curtains close drawne and a large fire in the roome he should be kept in a sweat or (to use a softer name) in a gentle *mador* for some weekes, being in the meane while carefully assisted by a Nurse or two, who upon the least moving from his furme [1] or putting a finger out of bedd, should correct his error by heaping on more cloaths. And during all this time nether the use of small beer or anything else that is accustomary or gratefull to his palatt should be allowed him, but instead thereof he should be constrained to drinke possett drinke or some such mixture and likewise to take cordialls of sundry and severall forms 3â *vel* 4â *quâque horâ*. For my owne part I should no less suspect his life to be in hassard under such discipline, then his case to be very uneasy. But to be more serious, I doubt not but that by such meanes as these greater slaughters are committed and more havocke made of mankinde every yeare then hath bin made in any age by the sword of the fiercest and most bloody Tyrant that the world ever produced; and which makes it yet more sad, this destruction lights not upon any so much as the youth and more flourishing part of Mankind, amongst whom likewise the richest, as being the best able to be att the charges of dying according to art, suffer most under this calamity.

"But now whether I have mended the matter both

[1] Furme=form, the same word as is used when we speak of a hare's *form*; that is, its bed or lair.

in exhibiting to the world the true if not the only history of this disease, which before lay entangled in the obscurity of notions taken up by bookmen and fitted to Hypotheses wherewith they had prepossessed themselves in their closetts; as allso in delivering a cure that will render this heretofore so fatall a disease as safe as any other whatsoever, will be the Question till 'tis tried but noe longer. And till then I doe not begg but may reasonably challenge a beliefe. I know to write the history of a disease is common, but so to doe it as not to deserve the just contempt expressed by that great Genius of rationall nature, the Lord Bacon, agaynst some undertakers of the like kind is somewhat more difficult. Allso to write the cure of a disease is not less ordinary, but so to doe the same as to render men as potent in actions as words will be thought a greater task by those that shall consider that every Praxis abounds with the cures of those diseases which neither the Auther himself nor any man since could ever cure.

"But lett me have don the one or the other ever so exactly, yet nevertheless I understand the Genius of this age and with what it is delighted, too well to expect any other reward from men save to be reproached for my paynes, which would have bin bestowed more advantageously to the accommodacion of my fame and interest, either in the starting some new supposition to administer matter of dispute in the schooles, or else in exhibiting to the world the

discovery of some minute part in the body which was as much out of the ken of former ages, as it is beyond the skill of this to improve the discoveries of the like nature which are allready made to the reall curing of diseases. However I shall not suffer my selfe to be discouraged by these considerations, but as long as Allmighty God shall give me life, shall still press forward to my avowed end of doing all the good I can in my calling, and shall trust him with myselfe and my concerns, enterteyning in the meane time a perfect contempt and undervalluing, either for the scornes of any man upon this account, or for that share of loss which I myselfe (though otherwise noe prodigall of my fortunes) may susteyne in my practice by discovering what I know or shall find out, to every body.

"Now if it shall be sayd that other men that have seen as much as I, and that have bin furnished with sufficient sagacity and parts to make observations, have thought otherwise of the subject here handled, I answere, that its not my business to excuse others, but in my owne defence to attest matter of fact, wherein I am not long able to impose upon the world; but 'twill quicklye be found out whether I have don a benefitt to mankind in this and succeeding ages by what I have here written, or whether like a person of profligated life and manners have drawne upon my selfe the deaths of men, even when I shall be in my grave. But *quid verba audio cum facta videam?* is not because Latine, a wiser saying and more expressive of

the vanity of dwelling longer upon this subject, then the Proverb of our owne country. 'The proof of the pudding is in the eating.'

"Written in Juli 1669."

In some fevers Sydenham followed to a certain extent a cooling treatment. In Agues or Intermittents he gave Peruvian bark very largely, and contributed to bring it into favour. He was not the first physician to use it even in England. It had been used by Brady, Prujean, and others some years before Sydenham wrote on Fevers; and Sir Robert Talbor, an unlicensed practitioner supported by the Court, had made it very popular, though he kept his method of administration a secret. Sydenham in his first book on Fevers, in 1666, spoke of this remedy with caution as sometimes useful though dangerous; but in 1676 had acquired greater confidence in it. In his later years he was no doubt specially distinguished for using this remedy, which he seems to have been the first to use as a tonic, in the manner shown by the following letter to a patient. It also gives Sydenham's opinion of the salutary effect, in some patients, of a fit of the Gout—an opinion in which he has not been singular.

"For the HONOURED MAJOR HALE
at Kings Walden.
"Leave this at ye Post house in Hitcham in Hartfordshire.

"*Sir*,

"Though I am perfectly satisfied that your case is

only that which in men we call Hyperchondriacall, in women Hystericall, proceeding from an Ataxy or Shatteredness of the Animall Spirits and accordingly that a course of steele was a very proper means for you to have bin put under, yet in regard it hath missed of that success which with great reason must have bin expected, I thinke it will be to noe purpose to turn that stone any longer at least after you have taken out the Pills you have allready by you. But 'twill be more adviseable for you for two or three weekes totally to abstain from medicines of all kinds for these two reasons. First for that you have eyther from Dr. Eeles or myselfe charged your body allready with many medicines soe that a little rest from them may be very convenient for you. And then for that I have often observed that medicines have not had theire due effect whilst they have bin takeing, but upon discontinuance the benefit which they have done hath bin manifest.

"But in case upon tryall for some little time you shall find your symptoms still pressing, I doe earnestly entreat you that you will use a remedy which I know you have a prejudice against, and which if you had not however you may think not at all indicated in your case, and that is the Peruvian Bark. I doe truely affirm to you that as it is as wholesome and innocent as the Bread that you dayly eat, for I have seen it succeed in such cases as yours where neither Antiscorbuticks or Steele have effected anything. If

you shall think fit to use this remedy be pleased to give me notice thereat, and I shall give order to Mr. Malthus to furnish you with that which I can depend upon and shall likewise instruct you how to use it.

"Be pleased to present my most humble service to your Lady, and for your selfe I could heartyly wish instead of a merry Christmas that you might have a smart fit of the Gout, which would quickly dissipate your other fears and those symptoms which if I mistake not doe naturally desire and discharge upon the Articles, and therefore amongst all tamperings that you may be put upon at any time I doe advize you to beware of bleeding or Purging as diverting this bitter but most effectual remedy, viz. the Gout.

"I am, Sir,

"Your most humble Servant,

"THO. SYDENHAM.

"Pell Mell, December the 17th, '87."

It may be observed that the use of Bark as a remedy not only modified Sydenham's practice, but must have somewhat changed his ideas about the action of remedies. It was impossible to explain its action on the old Hippocratic principles of concoction and elimination. He was obliged to call it a specific, and seeing its good effects, hoped that specifics might be discovered for other diseases, such as Gout. But he refused, for certain reasons, to allow that mercury was a specific in Syphilis.

Opium was a favourite drug of Sydenham's, so that he was called, we are told, "Opiophilos." He invented or introduced a liquid form of Laudanum, called by his name, the Laudanum previously used having been a solid preparation. The name "Sydenham's Laudanum" was in use a century or two after his death, especially on the Continent, and is still found in recent French and Austrian pharmacopeias. Old pharmacy jars, of .French or Italian manufacture, sometimes bear the inscription "Laudanum Sydenhami." This preparation, closely resembling "Wine of Opium" in later pharmacopeias, has probably made Sydenham's name more widely known than any of his books. He used Opium in the form of his Laudanum for a variety of diseases in which it was not usually employed, such as Small-pox and Gout, and probably contributed to bring it into more general use. At the same time the famous old medicines containing Opium, such as Theriacum, were going out of fashion.

X

Sydenham's Home Life and Last Days

IT seems now a convenient time to relate what little is known about the rest of Sydenham's life, which, like that of most doctors, was uneventful.

As regards his family, we know that his eldest son, William, was born before 1666 from the allusion in the "Methodus Curandi Febres," published in that year, where Sydenham, describing his method of treating Small-pox, says that he would treat in the same way his only son, whose life and safety he held of more importance than all the wealth of the Indies. This son actually suffered from the Small-pox in 1670, and was successfully treated.

In 1685 we find from a reference in the "Observationes Medicæ" that he was the father of *children*. From his will we learn the names of the two other sons, Henry and James. There is no mention of any other children. Sydenham's wife must have died before him, as she is not mentioned in the will; but

the date of her death is unknown. Mrs. Sydenham's mother, Mrs. Gee, survived both her daughter and her son-in-law ; Sydenham's regard for her is shown by his making provision for her in his will. We also know that Sydenham was a grandfather, as three children of his son William, named Barbara, Henrietta Maria, and Thomas, were living at the time of his death.

From these scanty notices we should conclude that Sydenham's domestic life, passed in a family circle which included four generations, was a happy one. While the affectionate language in which he speaks of his children, and his considerate care for the interests of others after his death, show that the great physician was a man of loving and generous nature ; doubtless as admirable in domestic life as in other private and public relations.

His professional life also must have been prosperous. He had his grievances no doubt. We know that Sydenham complained frequently and bitterly of the opposition he met with from the profession, and thought that this interfered with his success. "By the whispering of some," he told Andrew Broun, "he was balked the employment of the Royal Family, though he was before that called among them one of the first physicians." He was also apparently warned by his friends, and himself believed, that he risked his reputation by promulgating new and strange doctrines, and even injured his prospects by too openly divulging

his methods of treatment to the world. Sydenham was above all such mean considerations, and frankly accepted the possible injury to himself resulting from this manly self-assertion and conscientious endeavours to do good to mankind ; but the odium left its mark.

Nevertheless, after making all allowances, and admitting that by studying popularity he might have made more money, it is plain that he was on the whole very successful. His practice kept him constantly busy, and he numbered many persons of distinction among his patients. Indeed, his life might have been pronounced in all external respects perfectly prosperous but for the troublesome and painful interruptions caused by his frequent illnesses, which to a man of less resolution might have been a sufficient excuse for undertaking no important work.

He began to suffer from Gout before his thirtieth year ; and to this was afterwards added the still more painful disease, Calculus. The attacks were certainly frequent, for in the summer of 1660 (when thirty-seven years old) he was laid up for some months with a severer attack of Gout than he had ever suffered from before, and it was accompanied for the first time by Hæmaturia. In the early part of 1677 he had a very severe attack of Gout, and symptoms of stone, which made driving in a carriage extremely painful to him. These troubles lasted for three months, and compelled him to retire into the country till the autumn, so that during the whole of that year he was unable to visit

his patients. In 1681 his health was seriously shaken. He thought himself getting too old to go beyond his own house for company, and found literary composition increasingly difficult through his mind being unfitted for serious thought from the effects of Gout. In the "Dissertatio Epistolaris" published at the beginning of 1682, he says he is obliged to be brief because if he were to indulge in any deep train of thought, it would bring on an attack of Gout. These were only the severer manifestations of maladies which must have almost constantly harassed him.

It is no wonder, therefore, that Sydenham paid particular attention to these two diseases, and made use of his own experience to try and help others suffering in the same way.

His treatise on Gout is elsewhere spoken of; we will only set down here the regimen which he was led to adopt as a defence against these complaints, his cruel foes; since it gives us some notion of his general habits of life.

"Concerning the regimen and mode of life which seem suitable for those who labour under either of these diseases (Gout or Calculus), I add the following remarks, being unwilling to pass by anything which may be of use to such as are afflicted in the same way as I am myself.

"On getting out of bed, I drink a dish or two of tea, and ride in my coach till noon; when I return home, and refresh myself moderately (for moderation

is the one thing to be always and most strictly observed) with some sort of easily digestible food that I like. Immediately after dinner, I am accustomed every day to drink somewhat more than a quarter of a pint of Canary wine, to promote the concoction of food in the stomach, and to keep away the Gout from the bowels. After dinner I ride in my coach again, and (unless prevented by business) drive two or three miles into the country, to breathe a purer air. [One of his favourite drives was to Acton.]

"A draught of small beer serves for my supper, and I repeat this when I am in bed and about to compose myself to sleep. My object in taking this draught is to cool and dilute the hot and acrid juices lodged in the kidney ; out of which the stone is formed. Both at this time and at dinner, I prefer the hopped small beer to that which is not hopped, however thin and mild. For even if that made without hops be better fitted by its greater softness and smoothness to remove a stone already formed in the kidneys ; still the hopped beer, on account of the slightly styptic quality which the hopps impart to it, is less likely to generate sandy or calculous matter, than that without hops, which is of a more slimy and muddy substance. On the days when I take a purge, I dine on poultry but drink my Canary as usual. I am careful to go to bed early, especially in the winter, nothing better than early hours, to accomplish a full and perfect concoction and to preserve that order and even course of life which

we owe to nature. Late hours on the other hand, diminish and corrupt the concoctions in old men who suffer from any chronic disease. One precaution I always take to prevent hæmaturia whenever I drive any distance over the stones (for on the level road I feel no discomfort) is to drink a full draught of small beer upon getting into my coach, and also, if I am out alone, before my return."

In another place Sydenham says that the best beverage for gouty persons is "one which neither rises to the generosity of wine, or sinks to the debility of water;" such as London small beer; but water pure and uncooked is dangerous. This opinion about plain water was often expressed by physicians in his day, and probably originated in the fact that drinking-water, in London and elsewhere, was often very impure, and really dangerous. Evidently, Sydenham did not, like Prince Hal, think meanly of "the poor creature small beer"; it must be remembered that the small beer of his day was a weaker beer than any one can easily obtain nowadays. Another anecdote bearing on the same subject is told on the authority of Charles James Fox, though whence he obtained it is not recorded. It says that Sydenham was sitting at his open window looking on the Mall (the south side of the street being not then built) with his pipe in his mouth and a silver tankard before him, when a fellow made a snatch at the tankard and ran off with it. Nor was he overtaken, said Fox, before he got

among the bushes in Bond Street, and there they lost him.

This is the only reference to Sydenham's smoking tobacco. He never speaks of it himself; but it is not improbable that, like his great contemporary, John Milton, he indulged in the solace of an evening pipe.

He was at this time living in the newly built street Pall Mall, next door to the "Pestle and Mortar." It appears to have been in that part of the street near the bottom of the Haymarket, and thus very close to the present College of Physicians. The "Pestle and Mortar" was doubtless the shop of Sydenham's worthy friend, Mr. Malthus, the apothecary, whom he mentions in his works, and made the guardian of his heirs, ancestor of the Rev. T. Malthus, the political economist. As the south side of Pall Mall and Cockspur Street were not then built, the house must have looked straight into the Mall in St. James's Park. Very few details of Sydenham's home life have been recovered, but the fragmentary anecdotes which follow are of some interest.

Beside his family, Sydenham sometimes had pupils living in his house, one of whom was the well-known Dr. Dovar, buccaneer and physician, first compounder of the immortal "Dovar's Powder," and author of "The Ancient Physician's Legacy to his Country." Dovar has left a curious account of how he was treated for the Small-pox by Sydenham while living with him. It appears that he was not allowed to stay in

bed during the first part of the illness. Dovar refers in another place to "honest Dr. Sydenham."

Another young man who might be called a disciple, as, according to Pulteney, he lived for a time in Sydenham's house, was Hans Sloane, afterwards knighted, a very distinguished naturalist as well as physician, President of the Royal Society and of the College of Physicians, and the virtual founder of the British Museum. [May we be permitted, in passing, a word of grateful tribute to Sir Hans for the remarkable medical library which he collected?]

The story about Sloane is that when he came up to London (in 1684?) after studying on the Continent, he brought a letter of introduction to Sydenham. The letter commended him as "a ripe scholar, a good botanist, a skilful anatomist." Sydenham perused the letter, looked hard at the young man, and said—

"This is all very fine, but it won't do—Anatomy—Botany. Nonsense! Sir, I know an old woman in Covent Garden who understands botany better, and as for anatomy, my butcher can dissect a joint full as well; no, young man, all this is stuff: you must go to the bedside, it is there alone you can learn disease."

Allowing for the exaggeration which is incident to all anecdotes, the story is not improbable. Sydenham, however, was afterwards very kind to the promising young physician, and frequently made him his companion in his favourite drive to Acton. On one

occasion Sloane took the opportunity of consulting Sydenham about his project of a voyage to Jamaica for the purpose of studying plants. Sydenham kept silence till the coach stopped in the Green Park, where Sloane alighted to walk home, and then burst out: "No, you must not go to Jamaica; you had better drown yourself in Rosamund's pond, as you go home." [Rosamund's pond was a piece of water in St. James's Park, a favourite place for suicides.] Sloane, however, did go to Jamaica, and with what important results to the science of botany is well known, as he brought back more new species of plants than any one person was known to have collected before.

Another well-known doctor who, though not an actual pupil of Sydenham's, was greatly influenced by him was Sir Richard Blackmore, a popular physician in the times of Queen Anne and George I., and author of "Prince Arthur" and other dull epic poems now forgotten, and the butt of all the "wits." Blackmore tells us that when a young man he asked the advice of Sydenham as to his studies, more especially as to what books he should read to gain a knowledge of medicine. Sydenham's reply is well known, "Read 'Don Quixote.' It is a very good book; I read it myself still." The obvious meaning of this retort was: "Read what you like; reading books will never make a doctor." Though Dr. Johnson, who repeats the story, has some ponderous remarks about the harm which such a flippant observation might do, it is

pleasant to think that Sydenham, like his friend Locke, was an admirer of the immortal romance which in his day was, in English, something of a new book. At least a new edition of Skelton's translation came out when Sydenham was at the University. But it has been, quite gratuitously, supposed that the saying was intended as a sarcasm on Blackmore, whom it is said Sydenham must have despised as a pedant and a prig. The historical fact, however, is that Sydenham never knew Sir Richard, or the author of these epic poems, which, though praised by Locke, Addison, and Johnson were the target for innumerable arrows of sarcasm and invective, since Blackmore did not receive the honour of knighthood, or publish his poems till some years after Sydenham's death. Our good physician could hardly have snubbed a young man for crimes he had not yet committed.

Blackmore, to him, was merely a young Oxford doctor (or perhaps an undergraduate) who very naturally sought guidance in his studies from the great physician. It may be observed, in passing, that Blackmore, though he had the unusual honour of being satirized by both Dryden and Pope, as well as by the whole army of wits and playwrights, owed this eminence, not so much to the dulness of his poems as to his vigorous onslaught on the immorality of the stage, and especially to his "Essay on Wit," in which he boldly threw down the gauntlet to the whole literary tribe.

Moreover, as a physician, his leanings were entirely the opposite of what would be implied by the epithet of pedant or book-worm. Perhaps the shaft of Sydenham's wit went home, and determined the future bent of his mind. At all events there was never a more thoroughgoing asserter of the uselessness of learning in medicine than was Blackmore in after years. He threw over all the classics, medical or lay, and renounced even the divine old man whom Sydenham almost worshipped, protesting that the writings of Hippocrates were of no value to a modern physician; and thus going much beyond his teacher. "Assiduous digging," he says, "in the works of the eldest physicians, is like delving for silver in the mines of Cornwall, which will not recompense the labour and expense." It is amusing also to find Blackmore more than once quoting "the ingenious author of 'Don Quixote.'"

Such was the effect of an *obiter dictum* of Sydenham's.

One other pupil of Sydenham's may be mentioned—Bartholomew Beale, son of Mrs. Mary Beale, who painted Sydenham's portrait. He afterwards practised at Coventry.

Another glimpse into Sydenham's life is given by Dr. Andrew Broun, already mentioned, who travelled from Scotland to become acquainted with Sydenham's methods of treatment. The most important particulars which he has recorded are mentioned elsewhere. We will only here observe that his visit took place in

the last year of Sydenham's life. Even then, he says, the old physician, though honoured by the admiration of most of the eminent men of his own profession, still felt bitterly the neglect and opposition which are elsewhere spoken of.

As years passed Sydenham became more and more afflicted with the two diseases already spoken of. He found composition increasingly difficult and laborious ; and, we may suppose, was less able to practise his profession. Still he persevered in doing good to others and striving to advance the science of medicine.

The last work, which he himself published, the "Schedula Monitoria," begins with these words :—

"Although my advanced age and constitution, broken by continual maladies, might have seemed rightly to demand release from the labour of thought and intense meditation, yet I cannot refrain from endeavouring to relieve the sufferings of others even at the expense of my own health." Its closing words, which follow directions for the treatment of the painful disease from which he himself suffered, are : "And this is about the sum of all I know respecting the cure of diseases, up to the day on which I write—namely, the 29th September, 1686."

So Sydenham laid down his pen, and all we can say about the remaining years of his life is that he wrote no more.

He died on December 29, 1689, at his house in Pall

Mall, and was buried, December 31st, in St. James's Church, Westminster, now generally known as St. James's, Piccadilly.

The original monument or inscription which marked his grave having disappeared, a tablet was placed at the expense of the College of Physicians, with the following epitaph. Who actually composed it is not recorded, but very probably it was Sir Henry Halford, who inserted the fine phrase adapted from a line in Horace—"*medicus in omne ævum nobilis*" ("a physician famous for all time").

PROPE HUNC LOCUM SEPULTUS EST
THOMAS SYDENHAM
MEDICUS IN OMNE ÆVUM NOBILIS
NATUS ERAT A.D. 1624
VIXIT ANNOS 65.

DELETIS VETERIS SEPULCHRI VESTIGIIS.
NE REI MEMORIA INTERIRET
HOC MARMOR PONI JUSSIT COLLEGIUM
REGALE MEDICORUM LONDINENSE A.D. 1810
OPTIME MERITO.

XI

Sydenham's Will—His Children and Descendants

AN inspection of Sydenham's will shows that it was executed November 27, 1688. He orders that his body shall be buried where his executors shall direct, without any pomp or great solemnity. His real estate in the counties of Leicester and Hertford is left to three trustees—Richard Lee and William Lawrence, his brothers-in-law, and Daniel Malthus the apothecary—for the use of his eldest son William during his life, and ultimately to his three children in equal shares, providing for the jointure of William's wife. The two younger sons—Henry, then in Spain, and James—were to receive £200 apiece; and an annuity of £25 was to be paid to the testator's mother-in-law, Katherine Gee, during her life.

After William Sydenham's death the rents of the Leicestershire property, of the yearly value of £130, were to go to his widow for life, and afterwards in

equal shares to his three children, whose names are given as Thomas, Barbara, and Henrietta Maria. The Hertfordshire property was to go to the three children in equal shares directly. Daniel Malthus was to be the guardian of these children during their minority, and was to receive £10 a year for his trouble. A sum of £20 to buy him a piece of plate, in memory of the testator, was also left to this faithful friend, with warm expressions of confidence and friendship.

Another legacy of £30 was left to James Thornhill, son of Mary Thornhill, the testator's niece, to bind him apprentice to some profession or trade. The whole personal estate was left to William Sydenham, who was made the sole executor.

By a codicil, dated November 29, 1689, the yearly sum payable to Daniel Malthus was reduced to £5 instead of £10, in consideration that the larger sum might be too great a charge upon the estate. Also Henry Sydenham's portion was reduced by £50, which had been already given him for an "adventure."

The general effect of the will was that Sydenham, according to the custom of the day, left nearly everything to his eldest son, the two younger receiving only small portions. But as there was no preference given to heirs male in the next generation, it is evident that Sydenham did not entertain the ambition of "founding a family."

The total value of the estate is not given, but as the Leicestershire property alone was worth in modern money about £400 a year, it is clear that William Sydenham was well provided for. At the same time the whole estate probably did not represent a large fortune for a successful physician.

With respect to the persons mentioned in the will, we may observe that Henry Sydenham was evidently a merchant in Spain, while James, the youngest brother, was possibly not of age when his father died, as his portion was not to be paid for two years.

James Thornhill, the great-nephew mentioned in the will, adopted the profession of painter, and was afterwards well-known as Sir James Thornhill, an eminent artist in his day, who was employed in decorating the interior of St. Paul's Cathedral. His daughter married a greater artist, William Hogarth, and thus another eminent name is introduced into the Sydenham pedigree.

Daniel Malthus was an apothecary, Sydenham's neighbour in Pall Mall, and his intimate friend, who probably owed his success in business largely to the patronage of the great physician. His son, christened Sydenham Malthus, was the ancestor of the Rev. Thomas Malthus, the political economist, author of the celebrated "Essays on Population."

Our knowledge of the family and descendants of Sydenham is very scanty. The only son whose fortunes can be traced further is William Sydenham,

and but little is known about him. He must have been born about 1656 or 1657, and became in or about 1674 a pensioner of Pembroke College, Cambridge, the same college with which his father was incorporated in 1676 for the purpose of taking his doctor's degree. Dr. Munk, in his "Roll of the College of Physicians," states that William Sydenham seems to have left the University without taking a degree either in Arts or Medicine, but obtained a doctor's degree from some foreign University and became Licentiate of the College of Physicians November 29, 1687. In 1691 he presented a portrait of his father to the College. He certainly practised as a physician, whether in London or elsewhere we cannot say. He appears to have died about 1738, as in that year his name disappears from the College List. We find that a Mr. William Sydenham was buried at Toller Fratrum in 1740, which may have meant the doctor, but possibly it may have been a cousin.

Sydenham took a great interest in his son's professional career, and compiled for his use his posthumous work, the "Processus Integri." William Sydenham published in 1719 a little book entitled "Compendium Praxeos Sydenhami," containing a few emendations to the book just mentioned, and some additional formulæ derived from his father's manuscripts. It is a mere collection of formulæ in Latin, containing no original matter. An introduction was supplied by Dr. Walter Harris, an enthusiastic

admirer of the great Sydenham. Harris congratulates William on desiring to show himself worthy of so great a father, and also on this : that, beside being the inheritor of his father's talents, he had prolonged the paternal race by being the father of a numerous progeny. It would appear, therefore, that there were other grandchildren besides the three mentioned in Sydenham's will.

Among the grandsons we hear of Theophilus Sydenham, who gave a portrait of his grandfather to the College of Physicians in 1748. In the *Gentleman's Magazine* for March, 1775, is a notice of the death of John Sydenham, Esq., the "only surviving grandchild of the celebrated Dr. Sydenham." This is the latest notice of the family we have been able to find. Possibly there are descendants of Sydenham still living, but we have not succeeded in tracing any.

XII

Sydenham's Posthumous Works

IF we were asked which of Sydenham's works has been most popular and has had the most influence, we should have to mention the small work published after his death, entitled, "Processus Integri in morbis fere omnibus curandis," London, 1693. ("Complete methods for treating almost all diseases.")

The history of it is interesting. This little compendium (for it is a tiny volume) was written out by Sydenham for the use of this son, but delivered for safe keeping to a friend, Dr. Monfort, who edited and published it. Monfort first had about twenty copies printed for distribution among private friends. In some way a copy came into the hands of the publishers of a German erudite journal, the *Miscellanea Curiosa* of Nuremberg who reprinted it in their journal, but in an inconvenient form. Monfort thereupon, with the approbation of the College of Physicians, published a regular edition

in 1693, which was followed two years later by a second. The success was remarkable. Salmon, the English translator, tells us that "many thousands" of these two Latin editions were sold. The English translation, called "Dr. Sydenham's Practice of Physick," appeared in 1695, and probably had also a large sale. This was a remarkable success for a medical book in those days. Very numerous editions have since appeared, both here and on the Continent.

This little volume was the Vade Mecum of English physicians for more than a century. The present writer can even remember an Oxford medical student who, in his admiration for Sydenham, committed large portions of the "Processus Integri" to memory. It is right to say that his example was not generally followed.

Certainly nothing could be more suited to be a guide for practice, since it consists of an abridgment of all Sydenham's precepts on the treatment of disease, omitting explanations and discussions, so as to be reduced to the smallest possible compass. Such abridgments are generally the work of compilers; rarely has a great writer himself prepared such a concentrated essence of his own works.

In the second and subsequent editions are added two short chapters, one on Phthisis, the other on Gout. The former must have been extracted (and translated) by Monfort from Sydenham's MS., since it agrees very closely with an English chapter in

the Oxford MS. elsewhere spoken of. The chapter on Gout is essentially an abridgment of Sydenham's "Tractatus de Podagra." It mentions how Sydenham (spoken of as "autor clarissimus") treated himself for the Gout. This has been supposed by a modern writer to show that the "Processus Integri" was not Sydenham's own composition. But the explanation is obvious.

"ANECDOTA SYDENHAMIANA."

Some other medical observations of Sydenham's, not published till the year 1845, have a curious history. The late Dr. Greenhill, one of the most learned physicians and most exact medical scholars that this country ever produced, discovered among the Rawlinson MSS. in the Bodleian Library a small volume inscribed, "Extracts of Sydenham's Physick Books and some good letters on various subjects," which contains notes on various medical topics. The writer was evidently well acquainted with Sydenham, and states that he compiled these notes partly from Sydenham's dictation in the years 1682–3, and partly from certain MS. notes of Sydenham's to which he had access, written before 1670. On this evidence, together with remarkable coincidences between these notes and other passages in Sydenham's printed or unprinted writings, there could be no question of their authenticity. But Mr. Fox Bourne has since added a new interest to this MS. by showing that the

whole is in the handwriting of John Locke, with which Dr. Greenhill was not acquainted. It was printed with the title, "Anecdota Sydenhamiana, Medical notes and Observations by Thomas Sydenham, M.D., hitherto unpublished." Oxford, 1845; the editor, Dr. Greenhill, modestly concealing his name.

The book is partly in English, partly in Latin. The English portions, which have only an occasional Latin sentence, are said to be copied from Sydenham's own notes, and are evidently his own composition. These portions agree in subject with parts of the "Processus Integri," and partly with the English MS. of the College of Physicians elsewhere spoken of. The Latin portions are for the most part said to have been taken from Sydenham's own lips, and, therefore, what the original language was may be uncertain. But as all the connecting words and sentences are in Locke's Latin, we must suppose that he was responsible for the whole of the Latin. Locke probably wrote ordinary Latin as fluently as English, but Sydenham seems generally to have used English for recording his observations. As in every other case known to us, all that Sydenham writes is in English.

As an example of Sydenham's less usual methods of treatment, we may quote the "Methodus Medendi morbos per accubitum junioris" ("Putting a child or young person to bed with an invalid"); with the idea apparently that the natural heat of the human

body had some specific virtue. Several cases are recorded in Sydenham's own English.

"One Mr. Little had a fever about seven weeks, and at the time was so far spent that his doctor judged him a Dead Man. He was ancient, and having been treated with violent medicaments, was as weak as ever I saw any that recovered. Other treatment having failed, I told his wife that nothing could preserve his life but the putting a boy to bed to him. So she procured a Link Boy to lie very close to him all night. The next morning I found his fever almost off, and his eye and countenance more lively, upon which I pronounced all danger to be over. Yet afterwards, upon the recess of the boy, he began to relapse, but the boy being got again, without any more treatment he perfectly recovered."

The same way he cured Bishop Monk's lady, an aged woman of a very feeble and thin habit of body, so weakened by an Ague that her physicians looked upon her as dead. Sydenham told the doctor nothing could save her life but a speedy transplantation of some young spirits upon her. Accordingly a girl of thirteen years was put in close to her breast, upon which she recovered very speedily. Unfortunately the girl fell sick, which was attributed to her lying with the lady ; but Sydenham was confident to the contrary, and the girl in the end got well.

These cases may be regarded as among the curiosities of medical practice.

One very remarkable statement is made about a certain Tinctura Alexipharmaca D.D. Sydenham, for which a very elaborate prescription is given. Of this Sydenham is made to say that when in Scotland he used a gallon of it. No other allusion is known to Sydenham's having been in Scotland, but it may have been when he was serving in the second War.

One chapter on the Nephritic Paroxysm, said to be taken from a MS. of Sydenham's written in 1670, is literally the same as a passage in the MS. of the College of Physicians, and must have been copied by Locke from that—a coincidence which confirms the authenticity of both documents.

"THEOLOGIA RATIONALIS."

Among the writings of Sydenham unpublished during his lifetime reference must be made to a manuscript treatise, entitled, "Theologia Rationalis," by Dr. Thomas Sydenham. This was printed in Dr. Latham's English edition of Sydenham's works from an MS. in the Cambridge University Library. Another copy, slightly more complete, is in the British Museum. Both are in a more modern handwriting than Sydenham's time, but the work must be considered to belong to the author to whom it is attributed, unless any reason can be shown to the contrary. The work is a fragment of a Treatise on Natural Theology, designed to prove, on rational principles, the existence of God and the immortality of the soul,

and thence to deduce reasons for a virtuous life. The style and sentiments are perfectly consistent with what we know of Sydenham, and it seems reasonable to suppose that he was the author. But without discussing the matter, we will leave the reader to judge by copying the opening paragraphs.

"The question is, how far the light of Nature, if closely adverted to, may be extended toward the making good men? Toward the determining of which, this is all that shall be taken for granted by me, viz., that he is a wise and thinking man, whoever he may be, that sets upon this enquiry.

"Such a man must needs think thus with himself. I see that there is a most perfect and exquisite order in the several natures of the world fully conducing to the preservation of their individual beings, and to the propagation of their kinds. In all which they contribute nothing themselves by their own counsell or contrivance, as not knowing how they are made or how continued in their beings. And therefore I am enforced to think that something which is partaker of admirable wisdom and power is the contriver and maker of them. But further, considering not only the artifice, by which these particular bodies which I see and converse with are made with respect of each of them to its self; but likewise that artifice, by which each of them hath some subservience one to another for safeguard, food and other convenience, I am still led into greater certainty, that there was

some Supreme Nature which (without and differing from all these) did as he made them so, put them into this order in reference to one another.

"But extending my thoughts yet further, and considering those innumerable and immense celestial bodies which I can take in with my natural eye, and those yet as many more which I can take in with the help of glasses, and all these put and preserved in motion so swift and regular, both for the convenience of each of themselves, and for the convenience of the whole, as cannot enter into the heart of the wisest man to conceive; how can I less doubt the being of a nature infinitely wise and infinitely powerful, by whose contrivance hath been performed and is continued the exquisite order of the stupendous fabric of the Universe, than I doubt my own being?

". . . In a word, there being such order in those particular bodies, whether sublunary or celestial, both in reference to one another and to themselves, and not being the least footsteps of counsell or reason to be found in any of them, by which they can contribute any thing toward the production of this admirable order which we call Nature; the same must be the contrivance of a wise powerful being, both without them and in a condition above them, which we call God."

Very few of Sydenham's letters have been preserved. We are acquainted with four only beside the letter to Boyle which is printed in Boyle's works. Two are

in the British Museum; one (to Locke) among the Shaftesbury Papers at the Record Office. One was in the possession of the late Dr. Munk, and a photographic facsimile of it was published by the late Sir B. W. Richardson in his "Asclepiad." There is also a *Consilium* by Sydenham, on the case of Lord Shaftesbury, among the Shaftesbury Papers.

XIII

In what Language did Sydenham Write?

THE question in what language Sydenham first wrote his books is a very curious one and has been much debated. They were all published in Latin, as we have seen; the English versions which appeared later being direct translations from these. Since nearly all books written by physicians throughout Europe were in Latin, there was nothing surprising in this, and it had the great advantage of making his works at once available for the whole learned world. Only surgical books and popular treatises on health, with the little pamphlets of the quacks, were in English. Moreover, Latin was the current tongue of Universities and learned bodies everywhere. Formal proceedings, debates in convocation, disputations, examinations, and many lectures were always held in the learned language. The Register and Annals of the College of Physicians were kept in Latin up to the end of the seventeenth century, when English was used on the recommendation of the legal advisers of

the College, in order to avoid the uncertainty arising from the ambiguity of many Latin phrases. The annual Harveian oration was given in Latin up to the year 1865. Harvey's own notes for his lectures on anatomy are still extant, and are in Latin, though he now and then breaks into English under the exigency of some difficult point. At the hospitals physicians used to dictate Latin notes of their cases, for we hear that at the beginning of the nineteenth century Dr. Wells of St. Thomas's Hospital was noted for the elegance of his Latin as compared with that of his colleagues.

In the Universities the custom was of course still more general and permanent, so that in Sydenham's time a sort of colloquial knowledge of Latin must have been essential for taking part in any University proceedings. To this day a speaker in Convocation at Oxford is supposed to ask leave to speak in English. On the Continent the custom of lecturing in Latin has quite recently died out. Within the memory of living men, one of the formal lectures on medicine in a German University was always given in Latin. The present writer has heard a hospital physician in Vienna use Latin when speaking by the bedside if there was anything he did not wish the patient to understand; and since such remarks were often of ominous meaning, it used to be said that when the patient heard the doctor talk Latin, he thought his case was hopeless.

Now from all this it is clear that a regular physician educated at a University was naturally expected to be able to express himself by speaking and writing in customary Latin; and therefore the presumption would be that Sydenham, an Oxford graduate who had also studied at Montpellier, was a sufficient scholar for these purposes.

But in Sydenham's case there are certain difficulties which must be considered. In the first place, his undergraduate education amounted, as we have seen, to almost nothing; and even the story already quoted about his reading Cicero after he had taken his degree, shows that he must have been conscious of his imperfect scholarship. No doubt Sydenham was, to say the least, a very clever man, and would have made better use of his opportunities than the average student, but in his second Oxford career he could hardly have had much time for purely linguistic studies.

These facts, together with certain positive allegations to be mentioned presently, must be allowed to weigh strongly in the direction of proving that he was not a finished Latin scholar.

There are, however, some important arguments or facts showing that he had a wide acquaintance with classical literature, as is seen from the allusions in his published works. He quotes not only the best-known classical writers, but some comparatively obscure, and shows a range of reading which is more literary than professional. Of the ancient medical authors he quotes

two only, Hippocrates and Galen; the former very frequently and often with some laudatory epithet, the latter only three times and on minor points. Aristotle is quoted once only. Aretæus and Celsus are never once referred to.

The allusions to and quotations from non-medical classics are more numerous. Cicero was Sydenham's favourite author; he calls him "the author I most admire, as the great teacher both in thought and language, the first genius of his own and perhaps of all ages." Besides him we find named or quoted Homer, Lucian, Theocritus, Virgil, Horace, Lucretius, Juvenal, Seneca, Persius, and Boethius. Among modern Latin writers the names of Politian, Scaliger, and Bacon occur. In addition we frequently come across current classical phrases, or in modern language "tags," some of which Sydenham's learned editor, Dr. Greenhill, has traced to the Adagia of Erasmus. Perhaps some of the minor classical quotations may have been derived from the same, or from similar sources.

Now even allowing that some of the quotations were made at second hand, it is clear that this shows a wide range of classical reading, and if wide reading implied a corresponding ability in composition there could be no question of Sydenham's competence to write his own works in Latin. But we know that being able to read a language and being able to write it are by no means the same thing.

On the other hand, there are several positive statements that Sydenham wrote originally in English, and had his works put into Latin by others. The first occurs in the pamphlet by Henry Stubbe, already mentioned. Quoting a sentence from Sydenham, he says, "'Tis true *he* did not pen it in Latin, but another (Mr. G. H.) for him; and perhaps his skill in *that tongue* may not be such as to know when his thoughts are rightly worded." This is, of course, rude, and meant to be disagreeable, but it is difficult to suppose that Stubbe merely invented the story. "Mr. G. H." evidently means Gilbert Havers, of Trinity College, Cambridge, of whom we hear again.

The second statement on the subject is a very definite one. Dr. John Ward, in a well-known work, the "Lives of the Professors of Gresham College," published in 1740, asserted that Dr. Sydenham's works were written in English and translated into Latin by Dr. Mapletoft, one of his medical friends, and Mr. Havers. This statement having been challenged, Ward replied in the *Gentleman's Magazine*, and there supported his position by the evidence of the Rev. John Mapletoft, son of the doctor, who testified that his father claimed to have translated all Sydenham's works contained in the volume of 1683. This volume includes all the works published in the author's lifetime, except the "Schedula Monitoria," which the younger Mapletoft had heard on the authority of Dr. Montfort (editor of the "Processus Integri") to have

been translated by Mr. Havers. He excepted the first book on the Treatment of Fevers (1666), because at the date of its publication Dr. Mapletoft did not know Sydenham. But this is the very book to which Stubbe's rude innuendo above quoted refers; so that these statements of Mapletoft and Stubbe, taken together, cover the whole of the works published in Sydenham's lifetime, and positively assert that they were not written in Latin by Sydenham himself.

The posthumous "Processus Integri" is said to have been printed from Sydenham's own manuscript, but this is almost entirely taken from his previous works; and so, though it is in Latin, it hardly raises the question of authorship. It is difficult to see what can be said against statements as positive as these.

The only definite assertion of Sydenham's having written Latin is a report at second hand that a number of letters written by him in elegant Latin, addressed to Dr. Baldwin Hamey, were still extant in the eighteenth century. But these letters can no longer be found, and though many letters addressed to Hamey are preserved in the College of Physicians, there is none from Sydenham. It is curious also that every scrap of Sydenham's handwriting now known is in English.

The most important manuscript in English bearing Sydenham's name is one in the library of the College of Physicians. As to the authorship there can be no doubt, though the identity of the handwriting is open

to question. It is entitled, "Medical Observations by Thomas Sydenham, London, Martii 26, 1669," and has a characteristic Sydenhamian motto, "Whatsoever thy hand findeth to doe, doe it with thy might" (Eccles. ix. 10).

It might be supposed that we have here the original of the Latin "Observationes Medicæ" of 1676, but it is not precisely this. Still less is any part of it, as Dr. Latham strangely suggests, a translation from the Latin. Evidently it is a rough first sketch for that work, containing observations written at various times, which were afterwards used, with more or less alteration, in composing it. There are also passages which first appeared in the "Epistolæ Responsoriæ," published in 1680, relating to the Venereal Disease.

We will venture to quote the preface, which is only partly the same as that afterwards prefixed to the Latin "Observationes," but written in Sydenham's noble style, and so characteristic, that were it discovered anywhere as a fragment, no one at all acquainted with our physician's writings could doubt the authorship for a moment.

THE PREFACE.

"Thus I think I have my being upon this terrestriall orbe which is both situate and as it were thrust out at vast distance from the glorious region of light and life, and likewise in a continual flux and reflux in all and every of its parts. Nor doe I only live upon it,

but weare also a body that is made up of the grosse and vile parts thereof, and is necessarily determined to that suddain change and dissolution whereunto the laws of its constitution have subjected the whole.

"But nevertheless I have an intellectuall nature, which incessantly aspires after another and that a more happy state of being, and besides its knowledge of a future happiness is furnished with faculties suited to the attainment thereof, if in compliance with the revealed will of God in Christ, and the innate laws of its owne originall purity it shall vanquish the irregular suggestions of my body, to which for a while it is coupled: and managing both its selfe, and that, under a due obedience to that will and those laws, shall employe the utmost faculties of both in adoring the supreme and ineffable being, in the practising of virtue, and in doing good to men. This being soe, I finde it highly imports me, as I am a Physician, not only with all my might to buckle to an industrious management of my calling for the present benefit of my patients, but likewise to the dayly improvement of the faculty its selfe, for the more universall benefit of mankinde when I shall be dead. In compliance, therefor, with the sense I have of what is my duty herein, I shall, God willing, set downe the most usefull observations which I have or shall make touching diseases or their cures. As to the faithfullnesse wherewith I shall doe the same I shall not need therein to beg the good opinion of any

man, by saying I should be afraid of anything I now write to entaile upon my selfe the deaths of men even when I shall be in my grave; but shall appeale to the observations of others (provided they be not superficiall), for the justifying my owne: as I can likewise doe to my owne conscience, for the single aime I have at the benefit of mankinde herein: being sensible that I have not been intrusted by God with these talents or skill how meane soever they are which I have received, to lay them out as I list either towards the acquiring riches or applause but to doe good in the world. But be my end what it will, sure I am that I do here in a little present even to the ingratefull and supine the product of all my great and soare travail both of minde and body, and perhaps in the meanetime am so well acquainted with the customes of this evill world, that I looke for noe other reward here for what I doe than their reproaching and vilyfying my labours. But 'tis noe matter, I expect my reward in a better state of being, and in a world where I shall be capable of true felicity, in which neither the aire nor dirt of this could have instated me."

We will give also two or three sentences from the work itself, which are really the originals of passages in the "Observationes," and see how they bear on the question of language. It seems clear that Sydenham wrote a plain English style, which was rendered into ambitious and rhetorical Latin with many useless

ornaments, for all of which the translator must have been responsible.

For instance, Sydenham speaking of fevers, observes that they differ from each other in successive years, unlike other diseases, and unlike species of vegetables which are the same in any year whatsoever. He gives two reasons in support of this, and then says :—

"Both which doe evince that they are of a quite different genius and nature."

This plain sentence appears in the Latin as follows :—

"Ex quibus constat morbos hosce utut quadantenus specie et symptomatis alienæ admodum esse indolis *et distare ut æra lupinis.*"

This last phrase, "as different as coins from Lupines" (flat seeds which were used on the Roman stage as substitutes for money), comes from Horace, and is just one of the traditional quotations, or "tags," with which a conventional Latin writer would swell out his phrase. It is not in the English, and was clearly added by the translator.

So in speaking of Measles, the English MS. says quite simply : "This disease begins with a rigor and horror, and an inequality of heat and cold, which the first day several times succeed one another."

In the Latin this passage appears as follows :—

A rigore atque horrore, calorisque et frigoris, quæ se mutuo primo die expellunt, inæqualitate *tragædiam orditur.*

"It opens the tragedy with shivering and shaking, and interchange of heat and cold, which on the first day drive each other out in turns."

It seems a very pedantic way of speaking of Measles, to call it a tragedy, or tragic spectacle ; but this piece of pedantry is due to the translator, not to Sydenham.

Many other instances of the rhetorical expansion of a plain English phrase might be quoted.

The natural inference would be that the Latin text with its characteristic rhetorical style must have been the work of Mapletoft and Havers. Dr. Latham has compared the style of some public lectures of Dr. Mapletoft's with the Latin Sydenham, and finds a great resemblance between them ; a certain "over idiomatic Latinity" being, he thinks, characteristic of both. He also gives a curious coincidence in one matter more than verbal, which it is needless to quote here. The style in the works of which the translation is attributed to Havers is, however, simpler.

The conclusion of the whole matter seems to be that even supposing Sydenham to have been able to write Latin of a sort, in private letters and so forth, he was diffident of his own powers ; and in important works, intended for the learned world, he had recourse to the services of better Latinists than himself, and chose Dr. Mapletoft as being a friend, and also because he had a reputation for writing elegant Latin. Havers, not being a doctor, was doubtless employed as a professional scholar.

It is needless to inquire why Sydenham did not acknowledge his obligations to his Latin translators, but probably it would not have been thought by any one at that time a matter of great importance.

It may be thought that this question of Sydenham's style is not now of much consequence. But it must always be a matter of interest to know whether we have before us the actual words of an author whom we admire or the words of some one else. To some readers it has appeared that the pretentious and artificial style of Sydenham's Latin works is both tiresome and unattractive in itself, and not what we should expect from the author's simple and manly character. It is a satisfaction to know that it was not our English physician's own language. The pedantry and rhetoric belonged to the translator.

Of Sydenham's English we have no specimen which was actually prepared for the press, and it would be hardly fair to take the rough notes above referred to as what he would have finally approved. The sentences are sometimes terribly long, and the syntax involved, if not questionable; but these blemishes might have been removed by the press-reader, if not by the author himself, before publication. When combined, as they unmistakably are, with rugged force, and occasional picturesqueness of expression, and with sudden outbursts of religious feeling, the style is characteristic of his age and of his party.

XIV

Sydenham and Hippocrates

SYDENHAM, as we have seen, prided himself on studying diseases without any preconceived hypothesis, and recording plain matter of fact. No doubt these were his aims, and he succeeded to a very large extent in attaining them. But had he succeeded completely he would have done more than any observer of Nature has ever achieved. The attempt to look at nature without prepossessions, and to record only so-called "facts" without explanation, is an ideal. No one has ever completely realised it. We cannot avoid using the forms of thought bequeathed by our predecessors, looking at Nature, so to speak, through their spectacles. The very words Disease, Fever, Epidemic are the outcome of a long process of observation and deduction. To say that a patient has a fever is a complicated inference, far indeed from being plain statement of "fact."

Sydenham in studying disease carefully guarded

himself against being biassed by the hypothetical explanations current in his day. He would not accept the traditional classification of fevers derived from old Greek and Arabian medicine. He refused to regard Fever as a mere process of fermentation, like the chemical school, or as resulting from the collision of discordant particles like the mechanical school.

But to avoid making any assumption as to the nature of disease generally, or of Fever specially, was beyond his power. He was obliged to take a great deal for granted. The "heir of all the ages," coming after a long series of investigators and thinkers, must do so. What Sydenham took for granted was the medical system of Hippocrates. He showed no respect for and hardly quoted any other ancient writer, and passed by the moderns in still more contemptuous silence. It is hardly too much to say that Sydenham regarded the "divine old man" as not only the earliest but the only physician before himself who had been quite on the right track. Later physicians had all erred more or less, though in the course of their wanderings they might have picked up some valuable truths.

It seems worth while, then, to inquire for a moment what it was in Hippocrates that Sydenham valued so highly.

The one feature in the Hippocratic writings (it is still difficult to say what Hippocrates actually wrote) which distinguishes them from many other ancient medical classics is that they contain a large number

of direct observations on sick persons, histories of cases, or, in modern phrase, clinical observations. These records are of great interest, because they show what actually happened to the sick man, not merely what the doctors thought about him. They also show the materials or data on which medical theories and methods of treatment were founded. The other ancient medical writings contain fewer such observations, partly because they are chiefly expository, or of the nature of text-books. The inference which some modern writers have drawn (and apparently Sydenham did the same) is that the writings of Hippocrates were founded on clinical observation, and the writings of the others were not, an inference which appears to the present writer not warranted. But this is a question far too large to discuss here. At all events, what Sydenham valued in Hippocrates was the abundance of clinical observation.

Another feature of the Hippocratic writings which had a great interest for Sydenham and for a long time determined the whole bent of his medical activity, was the celebrated treatise on "Epidemics," containing observations on the prevailing maladies of each year and season. So far as we know Hippocrates originated such observations, which have been developed into the science of epidemiology. Later medical classics had added little or nothing to the work of Hippocrates, so that Sydenham might fairly regard himself as the direct successor in this subject of

the Father of Medicine. The only previous observations on the subject in modern times had been made by Baillou or Ballonius, from 1570 to 1579, but there is no evidence that Sydenham knew of them.

If what has been here sketched out were the whole system of Hippocrates, and if our idea of him were to be founded on these features alone, he would appear as a pure clinical observer, collecting observations and drawing inductions after the manner of modern science. Some have thought that this is what he was and nothing else, but there was quite another side to Hippocrates which should not be forgotten, the *dogmatic* side, and with this also Sydenham was concerned.

Hippocrates was regarded in antiquity as the founder and chief of the *dogmatic* school of Medicine. He taught an elaborate system of medical theory, certainly not derived from experience alone, but from speculation also. This system explained diseases as disturbances of four imaginary "humours" or elementary principles of the body: their concoction or digestion, the production of a determination or "crisis," the discharge of a morbid material, and so forth; much too large a subject to discuss here. This, the so-called Humoral Pathology, has utterly passed away, and it is difficult for the modern man even to understand it. But it was accepted without question by Sydenham, who generally used the traditional terminology of this system in describing

any disease. Perhaps it would have been difficult to use any other expressions; and Sydenham may have treated the system as a sort of "working hypothesis." But it is notable that he never regards the Hippocratic dogma as a hypothesis like the modern hypotheses and speculations against which he was so fond of inveighing.

One principle derived from Hippocrates occupies so important a place in Sydenham's method, that it must be separately spoken of. It is the famous principle that "Nature cures diseases," not found precisely in those words in Hippocrates, but deducible from two or three expressions somewhat like it. The idea of a *vis medicatrix naturæ*, in some form or other, has prevailed all over the world. It merely expresses the fact that most diseases come to an end, and most sick people recover without the aid of art; and no other cause of recovery being apparent, we say that Nature cures the disease.

But what was meant by Hippocrates and Sydenham was something more definite; it was that the means by which Nature effects her cures are certain of the processes constituting the disease, while other processes are the effect of the disease itself, and merely injurious. How were the two kinds of processes to be distinguished?

The salutary processes or natural methods of cure were those by which something, presumably the matter causing the disease, was eliminated or cast out

of the body through some of the natural channels, producing various morbid discharges. The Hippocratics thought they observed that such discharges often occurred at the turning-point or *crisis* of the disease. Hence they talked about *critical* evacuations, *critical* sweats, and so forth, and stated or implied that such processes were followed by recovery.

By these considerations we can understand Sydenham's famous definition of a disease as "*an effort of Nature, striving with all her might to restore the patient by the elimination of the morbific matter.*"

This might seem to apply only to acute diseases which have a natural termination. But Sydenham applied it to chronic diseases also. He thought that Gout was the effort of nature to get rid of a deleterious substance which it could not eliminate ; by removing it from the blood and storing it away in parts of the body where it could do less harm. To these natural instruments of cure, Sydenham, with extraordinary insight, added another, namely, Fever. He held that the production of excessive heat was a means by which Nature neutralised the injurious matter causing acute diseases, and doubted whether such a disease ever got well without Fever. This idea, almost unintelligible to his contemporaries, has recurred in the most modern Pathology.

This general idea of Nature's method of cure was of course not peculiar to Sydenham, but he stated it with remarkable clearness, and made it the foundation of all

his treatment of disease. The aim of the physician should be to recognise Nature's curative methods, to support and strengthen them if they appeared too weak, to control them if they were violent. The physician had thus to be the critic as well as the servant of Nature. Whether these conceptions of disease and of treatment are true or adequate we do not propose to discuss. It is only necessary to consider how they influenced Sydenham's practice, which (excepting specific remedies) was based on this principle alone.

First it was an essential preliminary that diseases should be minutely studied. There should be complete histories of all diseases, and in writing them the author should carefully put aside every philosophical hypothesis whatever. Moreover, these descriptions should be as accurate and minute as possible ; just as painters in their portraits represent every mole and freckle, for some things which seemed slight and trivial might have important bearings. Also they should not be histories of particular cases merely, but, like the descriptions of botanists, comprise the universal characters of each species.

By a careful induction of all these particulars the physician was to arrive at a general *methodus medendi*, or method of treatment for such diseases.

This is a broad outline of Sydenham's method of inquiry and system of treatment. We see that he himself professed to derive it from Hippocrates as if he

were merely carrying on the work of the Father of Medicine. But Sydenham greatly extended the method of Hippocrates. He may be said to have been the first who explicitly laid down the principle that disease should be studied by the Natural History Method, like Natural objects, without trying to explain them. The method of most of his contemporaries was to try to explain all morbid processes by some chemical or mechanical theory, and to guide their practice by these explanations. Sydenham would have said, "Investigate first, explain afterwards if you like; but remember that Nature is always something very much greater than all your explanations."

He was never tired of saying that human faculties are quite incompetent to know the primary causes of natural phenomena. We may know the secondary or "conjunct," that is, proximate causes; in modern language, the immediate antecedents of any physical event, but the true causes are beyond our ken. It may be that Sydenham underrated the value of explanations or scientific theory in medicine. The science of Physiology which he undervalued is essentially an attempt to explain the processes of life and disease by wider generalisations, called physical laws. And physiology has had a far greater influence on the progress of medicine than Sydenham ever dreamed of. Still the lesson most needed by his contemporaries was that the premature attempt to apply

chemical, mechanical, or physiological theories to medical practice was misleading and pernicious. He enforced this lesson not only by precept, but by example, showing that the method of Hippocrates, who knew nothing of the modern sciences, was still fresh and living, and capable of leading to new and fruitful developments in medicine.

Next to Hippocrates the name of another great genius should be mentioned as having exercised a powerful influence on Sydenham, namely Francis Bacon. Sydenham had a profound admiration for Bacon. He never quotes or mentions him without praise and respect. There is no doubt that by Sydenham, as by his contemporaries, the men of science who founded the Royal Society, Bacon was regarded as the great innovator who had introduced a new spirit into the investigation of Nature. Cowley, the poet of the Royal Society (who was himself a Doctor of Medicine) has expressed this sentiment in unmistakable terms. It is the more necessary to state this because the tendency of late years, especially in England, has been to depreciate Bacon, and to question his influence on the progress of science. In saying this we do not pretend to estimate the position of Bacon among philosophers, but only to emphasise the historical fact that his writings had a powerful effect in stimulating research, especially in the generation following his own. As regards Sydenham himself, it might even be suggested that the germ of his

Hippocratic and natural method is to be found in a passage in the "Advancement of Learning," where Bacon laments that modern physicians have discontinued "that profitable and accurate diligence of Hippocrates, whose custom was to set down a narrative of the special cases of his patients," &c.

There is another passage from Bacon, quoted by Sydenham himself and bearing on the same subject. We do not know that Sydenham consciously followed the advice of Bacon, but the tie of intellectual filiation cannot be overlooked.

Besides Hippocrates and Bacon we cannot trace the influence of any earlier thinker on Sydenham's scientific method, but no doubt he would himself have named Cicero as the third great teacher from whom he had learned. He calls him "that Great Master of Thought and Language," as he calls Bacon "that Great Genius of Rational Nature." Beyond these three we do not discern any one to whom Sydenham acknowledges any intellectual debt. Among his contemporaries he has words of praise for many, but only Boyle and Locke seem to have made a deep impression upon him. The significance of frequent intercourse with two such active intellects can hardly be overrated.

SYDENHAM'S ORIGINALITY.

Though Sydenham prided himself on being the disciple of Hippocrates, and was, in a minor degree,

the follower of Bacon, he certainly possessed the merit of distinct originality. The independence of the old rebel was still there. He separated himself from all contemporary schools. The old traditional spirit of respect for antiquity, with a dislike of innovation, was evidently far from him. But it must be admitted that there were few genuine medical conservatives in his day. He was equally out of harmony with the Chemical school, represented by Willis, the greatest of his contemporaries; thinking that they dealt with speculative ideas, which degenerated into mere "word-catching," or verbal disputes. For the same reason he could not accept the Mechanical school represented by other contemporaries. But it is more remarkable that he failed to perceive the importance of Anatomy and Physiology. He spoke with great contempt of Morbid Anatomy, that is, the investigation of changes in the body produced by disease, or themselves producing disease. In a projected treatise on Medicine, the joint production of Locke and himself, still extant in MS. in the Shaftesbury Papers, these words occur in Sydenham's own handwriting :—

"Others have more pompously and speciously prosecuted the promoting of this art (Medicine) by searching into the bowels of dead and living creatures, as well sound and diseased, to find out the seeds of disease destroying them, but with how little success such endeavours have been and are likely to be attended, I shall in some measure make appear."

We do not know what arguments Sydenham meant to use, as this treatise was never completed, but subsequent experience has shown that here Sydenham was mistaken. Researches in morbid anatomy have had an immense influence on the progress of Medicine, and especially in the discrimination of diseases, which was one of Sydenham's main objects. The kinds of fevers which he so carefully investigated have only been clearly distinguished by the study of anatomical changes in the dead body, quite apart from any theoretical views.

These prejudices show of course a certain limitation or narrowness of view, such as is so often seen in men of original genius, who, absorbed in studying Nature by their own methods, undervalue or even despise methods employed by another school. It is one of the privileges of genius to be in this sense one-sided; the eclectic philosopher who carefully avoids this fault often shows other defects of a more serious kind.

This blindness to the importance of the whole anatomical school, which, as we have said, meant in England the school of Harvey, is the only serious defect which can be found in the completeness of Sydenham's character as a Reformer of Medicine. But after all this fault had its compensations. The correction which Sydenham applied to the anatomical school was probably needed. The anatomists and physiologists did little for practical medicine, and, what is more, seemed disinclined to study anything which

could not be put into a scientific shape. They wanted to rationalise everything ; sometimes, as in the case of Willis's Rational Therapeutics, they rationalised things prematurely. Nothing could, on the other hand, be further from Sydenham's views than the attempt to reduce everything to a scientific system. He cared little for science in itself. Pure intellectual curiosity, which after all is the mainspring of scientific research, seemed to him, perhaps partly owing to the Puritan strain in his character, of little importance. He valued knowledge only either for its ethical value, as showing forth the glory of the Creator, or for its practical value, as promoting the welfare of man.

The contrast which has been sketched out between the scientific school, of which Harvey was in England the founder, and the practical school of which Sydenham is the acknowledged leader, might suggest a comparison between these two great glories of English Medicine.

The work of Harvey which has gone on up to the present day, producing new fruit, laid the foundation of that elucidation of the problems of Life, which is and always will be the basis of the science of Medicine.

The great merit of Sydenham was to proclaim the great truth that science was, is, and always must be incomplete ; and that danger lurks in the natural tendency to act upon it as if it were complete. The practical man has to be guided not only by positive

knowledge but by much that is imperfectly known. He must listen to the hints of Nature as well as to her clear utterances. To combine them may be difficult; but the difficulty is solved in minor matters by the faculty called common sense; in greater affairs by the synthetic power of Genius.

These two currents of thought, the scientific and the practical, always have existed, and always will, in a practical science like Medicine.

The daily work of every doctor has to do with both aspects of Medicine. We are happy in having before us two such great examples: Harvey the master of Science, and Sydenham the master of Practice.

XV

Sydenham's Friends: Boyle, Locke, and others

WHILE Sydenham is so frequently complaining of the hostility which he encountered from members of his own profession (though these in his writings always remain anonymous) it is interesting to record the warm and significant friendships which also fell to his lot. Of these the most important were, no doubt, the intimate relations which he established with men so distinguished as Robert Boyle and John Locke.

The Hon. Robert Boyle was one of the most active, perhaps the most so, of that remarkable group of scientific investigators who, in the reign of Charles II., raised England to the foremost place among European nations in the pursuit of science, and gave their period a renown which has caused it to be often spoken of, and very justly, as the classical age of English science.

Boyle was about the same age as Sydenham, having

been born in 1626. We cannot say precisely when Sydenham first became acquainted with him, but in all probability it was during Sydenham's last year of residence in Oxford, where Boyle came to live in 1654, and joined himself to that scientific society of which we have already spoken. Boyle had been since 1646 engaged in chemical researches in London, being then connected with the earlier group of scientific inquirers in London known as the "Invisible College." While in Oxford Sydenham, as we have seen, was not specially connected with the scientific group, nor deeply interested in their pursuits. The mutual attraction between these two men would have depended upon a sympathy in general aims rather than on community of interest in special subjects. Both were investigators; both were Baconians, and ready to defy the rule of authority in matters of knowledge.

Boyle, too, we must observe, was above all things unprejudiced. He had leanings towards Alchemy and never quite repudiated a belief in the possibility of transmuting metals. In medical matters, which greatly interested him, he showed perfect tolerance towards those whom the profession called Quacks. In 1666 his name is found among those who attested the miraculous cures of one Valentine Greatrakes, a fantastic Irishman, who in a sense anticipated Mesmer and the Hypnotists; curing various complaints by stroking and manipulations. And since, according to

modern ideas, the "cures" of Greatrakes were by no means miraculous, herein Boyle showed only his scientific impartiality. This fact is not without significance in regard to his attitude towards Sydenham. For when he appeared in the same year as the patron (if we may say so) of Sydenham's Method of curing Fevers, his patronage of Greatrakes may have diminished the value of his approval of that work.

We have already seen that in 1663, when Boyle was frequently, though not regularly, in London, he did Sydenham a small service; while his connection with Sydenham's medical researches and with his first book have been already sufficiently discussed.

Boyle continued to interest himself in Sydenham's practice, as will be seen by the following letter, written in the year in which Boyle came to live in London; though it is evident that at this time he was still in Oxford. The book referred to was of course the second edition of the "Methodus Curandi Febres," in which Locke's congratulatory Latin verses were first published. The ironical references to "palmistry and chemistry" and the "Mountebank at Charing Cross" are significant as bearing on what has been said about the medical charlatanry rife in Sydenham's time.

The letter is printed in Boyle's works, and in Dr. Latham's Life of Sydenham, but in the latter not quite correctly.

We have not been able to trace any further correspondence between Boyle and Sydenham.

"*Dr. Sydenham to Mr. Robert Boyle.*

"PALL MALL, *April* 2, 1688.

"SIR,—It had becomed me to have begged your acceptance, when I took the boldness to tender to you the second edition of my book; but partly business, and partly an unwillingness in me to give you two troubles at once, diverted me from writing. But now that you are pleased to give yourself the pains of a thanks, which I never thought myself capable of deserving from you, I hold myself obliged to return you my humble thanks, that you take in good part my weak endeavours, and are pleased to have a concern (as you have always done) for me.

"I perceive my friend Mr. Locke hath troubled you with an account of my practice, as he hath done himself in visiting with me very many of my variolous patients especially. It is a disease, wherein, as I have been more exercised this year than ever I thought I could have been, so I have discovered more of its days than ever I thought I should have done. It would be too large for a letter to give you an account of its history; only in general I find no cause, from my best observation, to repent of anything said by me in my tract 'De Variolis,' but do greatly, that I did not say, that, considering the practices that obtain, both amongst learned and ignorant physicians, it had been

happy for mankind that either the art of physic had never been exercised, or the notion of malignity never stumbled upon. As it is palpable to all the world, how fatal that disease proves to many of all ages, so it is most clear to me, from all the observations that I can possibly make, that if no mischief be done, either by physician or nurse, it is the most slight and safe of all other diseases. If it shall be your hap to be seized or that disease (as probably you never may) I should recommend to you, upon the word of a friend, the practice mentioned in the 155th page of my book.

"I confess, some accidents there are incident to that disease which I never was able to master, till towards the end of last summer, and which, therefore, could not be mentioned by me, as a phrenitis coming on the eighth day, where the patient is in the vigour of his youth, hath not been blooded, and hath been kept in a dose from the first decumbiture ; as likewise (which is wont to be no less fatal) a great dosing, accompanied with a choaking respiration, coming on from the tenth day (reckoning from the rigour and horror, which is my way of accounting), and occasioned by the matter of a ptyalism in a flux-pox, baking and growing thick, as it declines and comes to a concoction in those days. But, which is observable, the small-pox never fluxes or runs together, but it hath been thrust out before the fourth day ; and where you see any eruption the first, second, or third day from the decumbiture, you may safely pronounce it will be

a flux-pox or a measle, for that sort, in its first appearance is like it. And, which is likewise observable in the highest flux of all, as that which comes out the first or second day, it is in vain to endeavour the raising them to an height, for it is both impossible and unsafe to attempt, but all the discharge there can be, must be either from a ptyalism, in a grown person, or a diarrhœa, in an infant, to whom the same is no more dangerous than the other to the former; and, wherever they flux, their discharge must be made one of those two ways. But of these things I shall discourse to you more at large, when I shall have the happiness to see you, which I hope may be suddenly.

"The town stands well in health, and at our end not anybody sick, that I hear, of the small-pox. I have much business about other things, and more than I can do, who yet am not idle. I have the happiness of curing my patients, at least of having it said of me, that few miscarry under me; but cannot brag of my correspondency with some other of the faculty, who, notwithstanding my profoundness in palmistry and chemistry, impeach me with great insufficiency, as I shall likewise do my taylor, when he makes my doublet like a hopsack, and not before, let him adhere to what hypothesis he will. Though yet, in taking fire at my attempts to reduce practice to a greater easiness, plainness, and in the meantime letting the mountebank at Charing Cross pass unrailed at, they contradict themselves, and would make the world believe I

may prove more considerable than they would have me. But, to let these men alone to their books, I have again taken breath, and am pursuing my design of specifics, which, if but a delusion, so closely haunts me, that I could not but indulge the spending of a little money and time at it once more. I have made a great progress in the thing, and have reason to hope not to be disappointed. My occasions will not suffer me give you more trouble and therefore be pleased to accept of those very unfeigned thanks, which I here make you, for all the singular kindnesses and favours whereby you have obliged me to be very uncomplimentary.

"Sir, your most humble servant,

"T. SYDENHAM."

The name of Locke in the foregoing letter introduces us to the most important and interesting friendship of Sydenham's life.

John Locke was eight years younger than Sydenham, having been born in 1632, and in the same quarter of England—that is, in the adjacent county of Somerset. He also was closely connected with the Puritan party, his father having been a captain in the Parliamentary army. He entered Christ Church, Oxford, in 1652, and was therefore an undergraduate while Sydenham was a Fellow of All Souls'. Their acquaintance did not begin at Oxford; but its commencement is referred by Mr. Fox Bourne, in his "Life of Locke,"

to 1668, when Locke came to live in London. Dr. Mapletoft, a common friend, is believed to have made Locke and Sydenham acquainted.

Locke's great eminence in philosophy has made many people forget that he was a doctor. He was, however, a regular physician by education and by practice, having a medical degree. He first began the study of medicine in Oxford, though, for obscure reasons, he did not take his medical degree at the usual time; and studied at Montpellier for a longer period than Sydenham did. He was turned aside from active practice as a physician partly by his delicate health, partly through obtaining the position or domestic physician to Lord Ashley (the first Earl of Shaftesbury), which, together with a small patrimony, relieved him from the necessity of entering a profession for a livelihood. His practice among the family and friends of Lord Shaftesbury was, however, considerable. Numerous prescriptions and other records showing his professional activity are still extant in the Shaftesbury papers. Some have been recently published in the Journal of Historical Medicine, *Janus*, by Dr. Withington. He treated his patron for a dangerous Empyema with remarkable skill, saving a life which was of importance to the State.

Morever, Locke was very nearly obtaining a position which would have given him great weight in the medical world, and might perhaps have been of signal importance to the science of medicine. He was at

one time desirous of being appointed Professor of Medicine in Gresham College on the expected resignation of his friend Dr. Mapletoft. But he never obtained the appointment.

The chief facts relating to Locke's association with Sydenham in medical research—their proposed combined work, of which fragments remain in the Shaftesbury Papers, and his notes of Sydenham's practice in the Oxford MS. "Anecdota"—have already been noticed. Their friendship remained unbroken till Sydenham's death.

It will be, however, interesting to inquire how far each of the two friends influenced the other, and which, if either, should be regarded as the dominant spirit. Some Continental writers have spoken of Sydenham as a pupil of Locke in philosophy, or as belonging to his school. But this was clearly not the case. There is no trace of this influence in Sydenham's works, and Locke's celebrated "Essay on the Human Understanding" was not published till after Sydenham's death. On the other hand, in medical matters, it is clear that Locke was rather the pupil of Sydenham. In the few communications or records of correspondence between them which have been preserved Locke always asks Sydenham's advice with great deference. He consulted him about his cases, as well as about his own health. The only extant letter from Sydenham to Locke refers to the latter subject; and so few of Sydenham's letters remain,

it may be interesting to give the greater part of it, copied from the original in the Shaftesbury Papers. We do not know enough about the nature of Locke's malady to be able to judge of its medical value; but the scrupulous and affectionate carefulness of his friend and physician are obvious. It is not dated, but Mr. Fox Bourne thinks it was written in the autumn of 1674.

Sydenham to John Locke.

"For Mr. Locke,—Your age, ill habit of body, and approach of winter concurring, it comes to pass that the distemper you complaine of yields not so soone to remedies as it would doe under contrary circumstances. However you may not in the least doubt but that a steady persisting in the use of the following directions (grounded not on opinion but uninterrupted experience) will at least effect your desired cure. First therefore in order to the diverting and subduing also the ichorose matter, it will be requisitt to take your pills twice a weeke as for example every Thursday and Sunday about 4 o'clocke in the morning, constantly till you are well. In the next place for as much as there is wanting in bodyes broken with business and dispirited upon the before mentioned accounts, that stock of naturall heat which should bring the matter quickly to digestion 'twill be highly necessary that you cherish yourselfe as much as possibly you can by going to bed very early at night, even at 8 o'clocke, which next to keeping bed,

that is unpracticable, will contribute more to your reliefe than can be imagined. As to diett, all meats of easy digestion and that nourish well may be allowed, provided they be not salt, sweet or spiced, and also excepting fruits, roots and such like. For wine a totall forbearance thereof if it could possibly be, and in its stead the use of very mild small beer such as our lesser houses doe afford, would as neare as I can guess be most expedient, for thereby your body would be kept coole and consequently all accidents proceeding from hott and sharpe humors grating upon the part kept off.

"This is all that I have to offer you and I have thought of it, and all circumstances relating to your case, with the same intention of mind as if my life and my son's were concerned therein.

"T. S."

Locke always wrote of Sydenham with the highest appreciation, as having introduced important reforms in medicine. Some years after his death, he laments that the physicians of the day had not followed Sydenham's natural method, but were still occupied with verbal disputes about their theories of disease.

Locke's practice was evidently founded upon Sydenham's, and we can see no great difference between them ; though we may assume that the older physician was a better practitioner.

But with regard to their views of medicine as a

science, the scanty records which remain of Locke's opinions seem to show that they were not precisely the same as Sydenham's. To begin with, Locke was a far more thorough-going sceptic than Sydenham as to all medical dogma. Sydenham, in fact, like most men of action, could not fairly be regarded as a sceptic at all. He felt the need of some organised body of doctrine to direct his practice, and found this in the system of Hippocrates. Locke, on the other hand, had no more respect for the doctrines of the ancients than for the speculations of the moderns. One sentence in a letter to Molyneux seems to show this :—

"You cannot imagine how far a little observation, carefully made by a man not tied up to *the four humours;* or *sal*, *sulphur*, and *mercury;* or to *acid* and *alcali*, which has of late prevailed, will carry a man in the curing of diseases, though very stubborn and dangerous, and that with very little and common things, and almost no medicine at all."

Of the words in italics, "the four humours" evidently means the "dogma" of Hippocrates and Galen; "sal, sulphur and mercury" refer to Paracelsus and Van Helmont; "acid and alcali" to the newer chemical system of Sylvius, as extended by Willis. The whole sentence is thoroughly in the spirit of Sydenham and expresses his practical method. But we see that Locke classes the doctrine of the humours with the modern speculations as all equally

unimportant, which Sydenham would probably not have done. If Locke had had to teach medicine, he would evidently have thrown much more of the Hippocratic baggage overboard, and might have accelerated the progress of the medical ship.

Moreover, Locke possessed, as was natural, a more subtle and highly-trained intellect than Sydenham. Hence he was more ready to see good in pure scientific research, which Sydenham thought of little value. He was a Fellow of the Royal Society, and occasionally busied himself, on the instigation of Boyle, with inquiries which Sydenham would probably have condemned as unfruitful. In his earlier medical papers, as we have seen, he joined Sydenham in rejecting Anatomy and especially Morbid Anatomy, as useless in the advancement of Medicine. But in after years he was wiser. There are letters of Locke's in the British Museum to Sir Hans Sloane referring to cases of Morbid Anatomy. Locke at once detects the cause, and recognises the value of the observation ; and expresses the hope that such observations will be multiplied, since they may throw light on certain conditions which cannot always be explained by the peccant humours and the like to which they were commonly ascribed. He would probably have extended Medicine on the side on which Sydenham saw no prospect of success. Locke's biographers think it a fortunate circumstance that he was not diverted to the practice of Medicine. Possibly ;

but the gain of Philosophy was the loss of Medicine.

In any case the connection of Locke and Sydenham was perhaps the most remarkable partnership, in thought and work, of two great physicians, of which we have any record.

There were other friends of Sydenham's of whom, did space permit, something might be said ; but all we can do is to give a bare enumeration of the names of some of them.

In All Souls' he became the friend of Dr. Millington, afterwards President of the College of Physicians, a man as eminent by his character and manners as by professional knowledge.

Dr. Mapletoft, Professor at Gresham College, an intimate friend of Sydenham as of Locke, has been more than once referred to. Drs. Paman, Brady, and Cole, all eminent men, conferred a benefit on medical science, and also showed their respect for Sydenham by eliciting from him the treatises before mentioned. Dr. Goodall's chivalrous defence of Sydenham has been already spoken of. He refers with high praise to Sydenham in the preface to his "History of the College of Physicians." The dedication of the treatise on Gout to Dr. Short shows that he also had made himself one of Sydenham's defenders. Sydenham himself recognises the respect and friendship of Walter Needham, an eminent anatomist and physician. Dr. Walter Harris, author of a book on the diseases of

children, of which it is reported Sydenham said he would have been proud to be the author, was one of his warmest admirers, speaking of him with enthusiasm in his lifetime and after his death.

Andrew Broun tells us that a very important person, Dr. Micklethwaite, President of the College, tardily acknowledged the merits of Sydenham's practice. "For when near death he did profess that notwithstanding the attempts of several against the methods of Sydenham, yet these would yet prevail and triumph over all other methods." Other ingenious and honest physicians, Broun says, made the same acknowledgment; though others, less honest, imitated Sydenham's methods while they disavowed, and even calumniated, the author.

It thus appears that among Sydenham's friends and admirers were many of the most eminent physicians of the time. His enemies and detractors, on the other hand, cannot be traced. The pamphlet of Stubbe and the veiled insults of Gideon Harvey, already mentioned, are the only literary evidence of controversy. Some ill-natured remarks of Martin Lister might be quoted, but they are quite unimportant.

Dr. Richard Morton is sometimes spoken of by continental writers as the antagonist of Sydenham. Nothing could be more misleading. Morton was a younger physician than Sydenham, and should rather be described as his follower, since his method was

much the same. His first book, "Phthisiologia," a treatise on consumption, appeared in the last year of Sydenham's life. In the preface Morton enforces the importance of practical observations in medicine, and takes occasion to pronounce a warm eulogium on Sydenham, not inspired by the partiality of private friendship, since Sydenham, we are told, hardly knew him by sight. Morton's well-known book on Fevers was not published till after Sydenham's death. In this he is led to differ from Sydenham on certain points, but does so in such a way that his deferential criticism and reluctant dissent are more flattering than uncritical agreement.

While Sydenham was gradually conciliating professional opinion at home, he met with more striking and immediate recognition on the Continent. It has often been the lot of reformers, as of prophets, to be sooner and more highly honoured abroad than in their own country and city. Many important professors of medicine showered praises upon him. Schacht, an eminent professor of Leyden, as we are told by Christopher Morley, constantly recommended Sydenham's works to his students. Ettmüller, of Leipzig, frequently mentioned Sydenham in his writings with praise. Spon (or Sponius), a physician at Lyons, also a medical writer, especially praised Sydenham's treatment of fevers, and says that he went in London by the name of "the Fever-curing Doctor." Dolæus, an encyclopædic writer on medicine, showed his

admiration in a more questionable manner. He wrote to Sydenham, asking him for an encomium to be prefixed to a forthcoming book. Sydenham answered that he was ready to give such as the book, after it was perused by him, might deserve. The impatient Dolæus, however, would not wait, but put out his book with a very honourable mention of Sydenham ; and also a *fictitious eulogium* under his name. We give this story on the authority of Andrew Broun. It shows, at all events, that Sydenham's reputation was widely diffused on the Continent, where his works were frequently reprinted, even in his lifetime. In the next generation it stood even higher. Boerhaave, the most eminent teacher of medicine in Europe, never mentioned Sydenham, as the story goes, without taking his hat off; probably a figurative way of saying that he never named him without a tribute of respect.

In his own country Sydenham's fame was of slower growth, though it was certainly rising at the time of his death. His books became increasingly popular, as is shown by the numerous editions which appeared of the Latin text, and of two English translations. Most of the eminent medical writers at the end of the seventeenth and beginning of the eighteenth century mention him with great respect. Blackmore, in Queen Anne's time, notes that Sydenham's works, with their original observations, were still read ; while Willis, with his Rational Therapeutics, was neg-

lected. And from the practical side, no doubt this was a fair judgment, though Willis's great services to anatomy and physiology can never be forgotten.

Before the first quarter of the eighteenth century Sydenham was established in the estimation which he still holds, as the great reformer of practical medicine, the glory of the English school, and was named with pride in Harveian orations as the "English Hippocrates." His influence, no doubt, largely contributed to form that sober empiricism, resting on the accumulation of detailed observations, which was the characteristic of English medicine in the eighteenth century, and which it has never lost. A recent medical historian, M. Laboulbène, has observed that the modern clinical school of Vienna might trace its special characteristics to the same inspiration.

In this inspiration we recognise Sydenham's chief contribution to the advancement of medicine. It was not his function to promote systematic science, some aspects of which he certainly undervalued. It was rather to hold up to over-confident Science its perpetual counterpart and corrective in the shape of simple observation. If this was a necessary task in his own day, it has often been needed since, and some may think it not quite unneeded even in this age of progress.

Not his contributions to the knowledge of special diseases, important as these were, nor his revival of the study of epidemics, which fairly earns him the name of

the founder of modern Epidemiology, constitute Sydenham's chief titles to fame. It was that he first set the example of the true clinical method. His independent and unprejudiced spirit, combined with great powers of observation, made him the type of a clinical investigator. To become such, not only intellectual gifts, but moral qualities, were necessary—strong character, perfect truthfulness, and an unfailing sense of duty, which in Sydenham were reinforced by his intense religious convictions. More than all other wise and good physicians of whom we know, he made his profession a part of his religion ; he prosecuted his task of advancing knowledge and healing the sick with the same fervent zeal which other men have shown in what are regarded as more sacred avocations. It is only by considering his life as a whole, from his youth upwards, that we can understand the complex influences, intellectual, political, and religious, which helped to mould the character of the great Puritan physician, Thomas Sydenham.

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